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BOMBAY BRANCH
OF THE
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MR. K. S. GOPALJI GULABHAI, MAMLATDAR, BROACH.

The President.—Where were you during the famine ?
A.—In Jambusar.
Q.—Were you there during the whole of the famine ?
A.—Yes.
Q.—How many villages have you ?
A.—87.
Q.—How many people were there on village gratuitous relief at the end of October ?
A.—Three hundred and fifty-four in my *taluqa*.
Q.—At the end of November ?
A.—Three hundred and fifty-eight.
Q.—At the end of December ?
A.—Four hundred and fifteen—384 men, 14 women and 17 children.
Q.—How many were there on gratuitous relief in January ?
A.—Six hundred and twenty-one in the last fortnight—548 men, 36 women and 37 children.
Q.—Why were so many men on ? Why didn't you bring on the women and children ?
A.—I think the greater number must have been village servants.
Q.—How many servants are there in each village ?
A.—From five to ten.
Q.—Who are they ?
A.—*Patarias*, letter carriers and persons who are employed to guard the village.
Q.—Now what was the number on village relief at the end of March ?
A.—Nine hundred and seventy-one—560 men, 204 women and 207 children.
Q.—Were there any relief works in your villages ?
A.—Yes.
Q.—Did you trouble yourself about relief works ?
A.—Yes, in the beginning we attended to works, but later on there was an Assistant Engineer appointed and then my duties abated in that connection.
Q.—Then you attended more to general relief ?
A.—Yes.
Q.—Was cholera very bad ?
A.—Yes, in May.
Q.—And the people left one of your great works ?
A.—Yes, two were left ; but we had other works ready for them.
Q.—In March was there any reduction of wages in your *taluqa ?*
A.—Yes.
Q.—What was the effect of that reduction ?
A.—People stayed on the works for a little while : they hoped Government would come round and raise the wages again.
Q.—How long did they stay on works ?
A.—I believe they stayed for a week or a fortnight, and then by degrees they left.
Q.—Did you ever go on the works in the period during which they got reduced wages ?
A.—Yes.
Q.—What did the people say ?
A.—They complained that the wages were very small ; we told them to go to the other side of the Nerbudda, where they would get the full wage ; they refused to go and said the climate was bad and that they would die.
Q.—Were these people really in want ?
A.—Yes.
Q.—What class of people were they ?
A.—Mostly Kolis, Talavias and Bhíls, also a few *patidárs* and Muhammadans.
Q.—Did you notice whether there was any proportion who was able to get on without Government relief ?
A.—I don't think so, they could have pulled on for a time.
Q.—What percentage would they be ?
A.—One-fourth of the whole.
Q.—Did you judge of that by their appearance or how ?
A.—Partly by their appearance.
Q.—Still these people must have been rather hard put ?
A.—Yes.
Q.—The people remained for a time and then went to their homes ?
A.—Yes, and some went to the Baroda villages and some to Kaira ; Baroda is quite close.
Q.—Did you go to the villages ?
A.—Yes.
Q.—Did you see in the villages any of those who had gone home ?
A.—Yes.
Q.—What state were they in ?
A.—I saw 50 people in a certain village : three of them were very bad.

Q.—When they returned home was there anything to support them?

A.—Perhaps a little. In Jambusar they collected grass and berries and lived by selling them and the fish which they caught. I reported that this reduction of wage had resulted in the return of the people to their homes and I recommended that they should be allowed increased wages.

Q.—I suppose you increased the gratuitous relief list of the villages when you saw that happening?

A.—Yes, we did to a certain extent.

Q.—Gratuitous relief rose but to a very small extent?

A.—We did it as far as we thought it absolutely necessary.

Q.—Time wore on and then the orders were reversed restoring the original wage. Did the people then return to works?

A.—Some did, but in many we began to distribute *taqávi*, and that may have kept some people in their villages.

Q.—I suppose the effect of these orders on the Broach district cannot be judged with reference to the Broach district alone. I suppose the whole province of Guzerát must be taken into account, because you say the people went to Kaira and other districts?

A.—They did not go very far, they went to Baroda.

Q.—Were relief works opened at Baroda?

A.—Not towards our border. Our people have relatives in Baroda and deal and trade with that State; they did not go further than the villages on the border.

Q.—At all events the reduction of the wage exposed them to great trouble?

A.—Yes, it did.

Q.—I have heard from Mr. Wood about the cholera on a tank in Jambusar. What was the cholera due to?

A.—It is difficult to say; there was a large collection of people, and we came to the conclusion that it had been brought from the Kaira district.

Q.—Were there new wells dug?

A.—Yes, and old wells attended to. All possible care was taken.

Mr. Nicholson.—In your answer to question No. 11 you say that the dole began to be distributed to the infirm from the 26th of January. Why that date?

A.—That must have been the date on which I received the first bill of the grain dealers.

Q.—It was not the date of the issue of orders?

A.—No.

Q.—You are of opinion that village works would be advantageous in your district?

A.—Yes.

Q.—Could they be carried out?

A.—Yes.

Q.—What about the mode of supervision: how would you manage that?

A.—I would divide my *taluqa* into groups and put each *taluqa* in charge of an overseer.

Q.—Do you think you could do useful work?

A.—Yes.

Q.—What works?

A.—Each village has its tank and its roads and people would have been glad to have them instead of the large tanks, on which we every year spend thousands of rupees.

Q.—What is the revenue of your *taluqa?*

A.—Rs. 4,80,000.

Q.—Of that how much was collected?

A.—Rs. 46,000 in the course of the year.

Q.—Has the rest been remitted or suspended?

A.—A portion has been remitted and a portion suspended.

Q.—Was it formally suspended?

A.—No.

Q.—How was it known to the people? Do you mean that village officers simply did not collect from them?

A.—Not only that, we ordered that notices should not be issued against them.

Q.—Village officers did not use any persuasion?

A.—No.

Q.—You say a certain number of people were made to pay?

A.—Yes, non-agriculturists and well-to-do agriculturists.

Q.—Were there definite facts which showed who were able to pay?

A.—In many cases we know what property a man has and what his debts are.

Q.—What were the definite facts on which the village officer or *mamlatdár* was to decide as to the condition of the agriculturists?

A.—They vary: we know the circumstances of the persons.

Q.—But there may be a great number who may escape notice?

A.—There are many landholders and we know what debts they have and property also.

Q.—How long have you been in the *taluqa?*

A.—I came towards the end of 1898.

Q.—Have you been able to make yourself so well acquainted with your *taluqa* that you know exactly who can pay and who cannot?

A.—Yes

Q.—If individual capacity is the guide, how do you divide the persons by their profession into *sowcars* and agriculturists, or into wealthy and poor or how?

A.—We put on one side *sowcars* and non-agriculturists and on the other side all agriculturists?

Q.—Then it was the profession of the persons and not their actual capacity to pay that you went by in giving suspension?

A.—The well-to-do were put on one side.

Q.—Has remission been general or partial?

A.—In this famine it has been general.

Q.—You did not go by the field but by the person?

A.—We did not go by the field.

Q.—You did not have any definite rules?

A.—We vary from year to year: there is no definite rule.

Q.—And every thing goes by the idiosyncracy of the *mamlatdár?*

A.—This was the first time that suspensions were given.

Q.—If there is a new *mamlatdár* what is his guide?

A.—Compulsory measures would be taken.

Q.—He would not know the *taluqa* and consequently would take compulsory measures all round?

A.—Yes.

Ra'o Sa'heb Gopalji Gulabbhai.

Answers by Ráo Sáheb Gopalji Gulabbhai, Mámlatdár of Jambusar in the Broach District, to the questions drawn up by the Famine Commission.

Introduction.

1. The outlook in my táluka (Jambusar in the Broach District) was hopeful when the rains of 1899 commenced.

The character of the harvests in the two preceding years was more or less inferior to the normal. The rain was excessive in 1898 and comparatively insufficient in 1897, while it was not evenly distributed in either year. Locusts also injured the crops in 1897.

2. The kharif sowings in 1899 were not up to normal. They represented only about 1 per cent. of the normal cultivated area of the táluka. The normal cultivated area has been arrived at from figures given by village officers.

3. The average rainfall of the táluka during the rainy season is about 35 inches.

The actual rainfall in the rainy season of 1899 was 7 inches 42 cents, and it represented 21 per cent. of the average. The rains entirely disappeared after the 11th October in that year; they might be said to have ceased after the 10th of September, having fallen but twice thereafter in very small quantities, *viz.* 4 cents on 24th September and 3 cents on 11th October.

The distribution of the rainfall was as under :—

Month.	In 1899.		In the preceding 7 years on an average.	
	In.	cts.	In.	cts.
June...	5	89	10	32
July...	.....		15	94
August	0	3	7	39
September	1	47	5	27
	7	39	38	92

4. The actual kharif harvest of 1899 was *nil*.

5. About 25 per cent. of the total population of this táluka depends exclusively on agriculture as petty cultivators and 15 per cent. as labourers.

Preliminary Action.

6. The necessity of relief was assumed from the fact of an almost entire failure of crops and test works opened in the beginning of September 1899 in order to determine the extent of distress and the necessity of help.

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Four works—tank digging—in different parts of the táluka were undertaken, and as they attracted labourers, more such works were opened, and large relief works followed at once.

7. The following were the observed facts which led me to think that the machinery of relief should be set in motion—

(*a*) Increase in the number of street beggars in the town of Jambusar.

(*b*) Wholesale tree cutting by people of the lower classes in order to sell the wood as fuel for their maintenance.

(*c*) Collecting of a subscription and opening of a cheap grain shop in Jambusar town by the people, the shop being taken advantage of by numerous people, and the flow of local charity in villages.

(*d*) Big grain thefts in the villages; travelling by one's self without company at noonday or in the evening being considered unsafe.

(*e*) Selling of metal pots by the people.

(*f*) Rise in prices of grain.

(*g*) Stealthy collection and sale of contraband salt by the poor.

(*h*) Theft and killing of cattle for food.

8. The work of digging tanks and of repairing village roads was first undertaken as a relief measure. The large attendance on such works and the eagerness with which people of all classes in the village went to work were taken as indications of distress.

11. The sequence of relief measures :—

Test works were undertaken on the 1st of September 1899.

Kitchens were opened on large relief works thereafter, the first kitchen having been opened on 15th November 1899.

A poor-house was opened later on, on 11th December 1899, in the town of Jambusar.

Dole began to be distributed to the inferior village servants from the 8th October 1899 and to the infirm and the incapable from the 26th January 1900.

Private charity was organised and it began to be distributed in several places from the month of August; a cheap grain shop was opened in Jambusar town on the 27th August 1899; and in a few villages the well-to-do residents got their tank excavated by the poor who needed help and daily gave them small quantities of grain for their work. In one village a local Vohora tradesman gave a handful of grain in charity to each and every comer for the asking for nearly two months, August and September 1899.

12. The system of local inspection.

A Relief Aval Karkún and several Circle Inspectors were appointed from 14th October 1899.

The táluka was divided in several circles, each of which was put in charge of a Circle Inspector, and the Aval Karkún was to help the Mámlatdár generally. The Mámlatdár had had to do the duty of the Relief Mámlatdár prescribed in the Famine Relief Code. The Subordinate Judge was appointed a Special Relief Officer for the táluka in addition to his own duties and another Special Relief Officer was also appointed later on.

The Mámlatdár had had instructions to watch the condition of people from the time of the failure of rains in July.

13. Loans under the Agriculturists' Loans Act and the Land Improvement Loans Act were freely issued from the very outset.

In the month of October 1899, Rs. 10,608 were given out as tagávi: Rs. 1,080 of these were under the Land Improvement Act, Rs. 1,000 being for constructing new wells and Rs. 80 for repairing old wells; and Rs. 9,528 were under the Agriculturists' Loans Act, Rs. 5,784 being for seeds, Rs. 3,277 for "Kosvarat," and Rs. 467 for clearing old wells.

There were loans also granted in the previous months under the Agriculturists' Loans Act, Rs.2,555 having been given out in September alone, Rs. 2,130 for seeds and Rs. 425 for bullocks.

These loans were issued to all classes of agriculturists who were in need of assistance, the loans of September and October being specially intended for keeping alive the dying crops and raising fresh crops by means of irrigation.

They were all recoverable in whole by instalments.

14. Irrigation wells cannot be said to be made in this táluka except in portions of it. The average depth below the surface of water was 35 feet on the cessation of the rains in 1899. The digging of wells was encouraged by loans, but it must be said that only a few were successful as a permanent improvement, though all served as a temporary measure to employ labour. None of them were successful in securing the crop on the ground, but several were in raising fresh crops.

15. The first works undertaken were tank digging and road repairing; they were undertaken from the savings of the Táluka Local Board and were under the supervision of the Board, that is to say, of the Táluka Local Fund Overseer and the Vice-President (Mámlatdár) and the President (Assistant Collector) of the Board.

16. The task exacted on these test works was 1,000 cubic feet from a gang of 30 persons, 10 men, 10 women and 10 workng children. The men did the digging and the women and the children worked as carriers.

This was the standard of task, and it was applied and exacted in all cases, those who attended the works at the time being all people of the cultivating

and labouring classes accustomed to such work. There were instructions however to see that if the task was too hard for people of any particular class or caste unaccustomed to rough work, it was to be reduced in their case.

17. The payment was in strict proportion to results. The wages were not to exceed 2 annas in the case of a man, 1½ annas in the case of a woman and 1 anna in the case of a child. There was no minimum wage and no rest-day allowance and no allowance to dependants.

Small Village Works.

52. Small village works under the Civil Agency were opened towards the commencement of the rains in 1900. They were intended to give relief near their home to people who returned from the large relief works at a distance from their homes in order to keep themselves ready for agricultural operations as soon as the rains came, and to those who left the large relief works on account of cholera, and they served their purpose. The first work of this class was opened on 15th June 1900.

53. They included small tank-digging and channel-digging works, which, as a general rule, were not to cost more than 500 rupees and not to give employment to more than 500 people.

54. They were conducted under the supervision of the Civil Agency by direct management.

56. The piece-work system was followed. The wages were fixed at the rate per diem of—

Rs.	a.	p.	
0	1	9	for a man,
0	1	6	for a woman, and
0	1	0	for a working child.

The men were the diggers and the women and children were carriers. The task to be exacted from a gang of 1 man, 1 woman and 1 child amounted to 75 cubic feet, and full work was to be exacted, there being a proportionally short payment for lesser work. There was no minimum wage, no kitchen, no Sunday allowance and no dole except to dependants in a reduced condition that could not be sent to a poor-house. The wages fixed were to be increased, if the lead and lift was more than ordinary.

Employment on these works was given to all classes of people excepting those who did not stand in real need of some relief or lived near enough to one of the large relief works to attend it conveniently every day from their home.

57. The selection of applicants for relief was made by the village officers with the assistance of a "panch" consisting of a few respectable residents of the village, and it was successful.

58. No small village work was opened at first within a distance of 5 miles from a large public work. These small works sometimes drew workmen

from the large ones, and the rule of the five-mile distance was also relaxed later on. (Government Resolution No. 2732 of 5th July 1900, Famine Department.)

59. It appears desirable to extend the system of small village relief works for the following reasons :—

(1) More useful works are done thereby and in more places than in the case of large relief works.

(2) People like to work on works nearer their homes on smaller wages : the task is not felt by them ; several inconveniences are removed and comforts secured on such small works, whereby the workmen retain health.

(3) It is necessary that people should be nearer their home just before the commencement of the rainy season, and at that time such small works would be of the greatest value.

(4) There is no danger of an epidemic breaking out.

(5) Supervision could be secured at the same cost as in the case of large works, these small works generally not requiring much skilled supervision and respectable local residents and officers of other departments also rendering assistance.

(6) No hutting and other expenses will have to be incurred.

(7) A system of selection of applicants for relief could be introduced without much difficulty in order to prevent those not in need of relief from getting relief, doubtful applicants being directed to a central large work.

(8) No kitchens and no allowance to non-working dependants will be necessary to the people working in their village.

Special Relief.

60. There are not many aboriginal tribes in this táluka, the Bhils and the Talávias being the only ones. They are distributed over almost all the villages of the táluka, and they serve as inferior village servants, or work as labourers. No special tests were applied to them, and none were necessary. They have come into close intercourse with people of the better classes surrounding them, and most of them joined the Famine Relief Works like other people. There were a few of them, who, however, kept away and chose to live on sale of grass-weeding, fuel, &c., at home. These were found out, and induced to join relief works if starving, or assisted otherwise if necessary.

62. No able-bodied persons were, at any time, engaged on works of private utility at public expense.

63. No special measures were adopted to relieve artisans of any class in their own crafts.

64. Such artisans neither showed any reluctance to go on ordinary relief works, nor were they physically unfit for ordinary labour. A few artisans of each class stuck to their business and earned sufficient to maintain themselves.

66. Several special measures were adopted to prevent mortality of cattle. The Commissioner, N. D., made arrangements for free grazing for cattle in the Thána District. In October 1899, cattle were accordingly sent by rail to the Thána District grazing lands. The animals were taken to Broach in the first place, and thence railed. The cost of conveyance was mostly paid from tagávi advances* made to the people, and though the people were once slow in taking advantage of the measure, they afterwards fell into it right willingly, and were only prevented from sending more, as there was no more room in the grazing grounds. The scarcity of fodder increased daily, and in several cases the people wanted to be free of their cattle to go to the relief works. They therefore submitted to the necessity, one seeing the instance of another. Out of 4,344 animals so sent, 689 returned alive, but in a very poor condition, 508 having been brought by the owners themselves with their own money, and 181 having been received through the authorities to be given to the owners, their cost* also being debited to tagávi grants made to the owners. It appears that the soft sleek cattle of Gujarát being unaccustomed to the hard soil and rough climate of the Thána District, and to the inferior grazing stuff to be had there, it did not fare well with them. The herdsmen in charge of the cattle, who accompanied them from here, left them to the care of the Thána District herdsmen as the place was strange to them, and disease broke out amongst the cattle of which large numbers must have been collected in places. It is satisfactory to note in this connection that out of 76 animals of the village of Kávi in this táluka that were sent to Sanján, as many as 70 returned alive, the owners having kept herdsmen of their own from beginning to end, and the cattle being kept in the waste lands of a charitable Parsee gentleman whose offer was accepted by Government.

* Rs. 13,434-12-0.

* Rs. 559-11-10.

A cattle camp was also started in Broach, where sound young bullocks were kept and taken care of by Government for a moderate charge. 667 animals of this táluka took advantage of this camp; most of them returned home in a tolerably fair condition. In order to enable the owners to meet the cost of these animals, they were granted tagávi* in all cases, where they were unable to meet it themselves.

* Rs. 8,349-10-0.

67. Compressed grass was also supplied at cheap rates to *bonâ-fide* agriculturists, in some cases the men going to Broach and fetching the grass themselves, in others the grass being brought for them to Jambusar in carts or to the bunders on the sea-coast in this táluka in country crafts. In this way

1,421,683 lbs. of grass was brought by 1,601 individuals at a cost of Rs. 10,869-13-8, exclusive of cart hire, almost the whole cost being recovered from tagávi grants to the people.

Gratuitous Relief.

68. Dependants on large works were relieved by cooked food in the kitchens attached thereto. On small village works in charge of the Civil Agency, they were relieved only if in reduced condition, by being put on dole consisting of uncooked grain, if they could not be sent to a poor-house.

69. Gratuitous relief was granted mostly in the form—

(1) of cooked food in kitchens on large works, and

(2) of dole consisting of uncooked grain elsewhere.

The former was chosen as securing the right use of it and as there was always a civil establishment on the work available to undertake and supervise the arrangements necessary for the purpose. Elsewhere the kitchen was an inconvenient business to manage. The difficulty of getting fuel and pots was always great; there was also the fear of want of proper supervision, if the business was left to the village officers in order to be economical. Over all was the averseness of the people to the taking of cooked food; they prefer half starvation to feeding in a kitchen which involves a social and religious degradation. Besides, they like the system of uncooked grain, inasmuch as they can lay by something out of the dole, if they like. Kitchens were opened in several places in this táluka in the months of August, September and October, but those for whose use they were intended, stoutly refused to attend them, and the result was that such people had to be put on the grain dole again: they were Mussalmáns, Pátidárs, Rajputs, Káchhiás and others. The forced attendance of agriculturists at these kitchens was also deemed inadvisable on the ground that it would interfere with their proper business.

71. There was one central poor-house in the táluka; it was opened on 11th December 1899. It was the entirely destitute and unable to work who mostly frequented it, the majority being Kolis by caste. The numbers were the largest in April and May 1900, the highest number on record being 902.

72. The poor-house was generally not used as a depôt for vagrants and immigrants: there were, however, cases in which poor worn-out travellers and others entered it, and suddenly left it after a day or two. Sometimes such persons were given shelter and food for a night or a day on their way to another place.

Persons who refused to work on relief works were not sent to the poor-house as a punishment, but those who had been reduced or had fallen sick while working were so sent.

73. Measures were periodically taken to weed out the poor-house; people were sent out to works, or were allowed to go their way if they liked, when they became convalescent and fit to work.

74. Sixteen village dole-kitchens were opened in this taluka: they were all opened after the rains broke in 1900. They were attended by the people of the village wherein they were situated, and by no others. Cultivators of the better classes such as the Rajputs and Pátidárs and others refused to attend them. These kitchens were expected to serve a group of 3 or 4 villages, but in practice they served none but the village in which they were opened.

There were also kitchens attached to all large works: their total number amounts to 16. Seven of them were opened after the rains broke out, and 9 before. These kitchens served none but the dependants of the workmen and the infirm &c. of the village in which they were opened.

75. The ration provided in a kitchen was the minimum ration mentioned in the Famine Relief Code. It was—

	For adults.	For children.	
		From 8 to 12.	Under 8.
	Ozs.	Ozs.	Ozs.
Grain	15	9	7
Dál	2	1	1
Salt	½	⅛	⅛
Sweet-oil	½	¼	¼
Condiments and Vegetables ...	½	¼	¼

Meals in the kitchen were distributed at two fixed times in the course of the day, namely, at 10 A.M. and at 5 P.M.

People were compelled to feed on the premises, except in the case of the infirm and the sick, who could not attend, and for whom their food was taken home by a relation or friend.

76. Civil kitchens, that is to say, kitchens in villages were not opened in any place where there was a big work with a kitchen attached thereto. They were opened in large villages only and never close to a large relief work.

77. Admission to kitchens attached to large relief works was restricted to the non-working dependants of the workmen and to the destitute and infirm of the village in which the work was situated. The selection of the non-working dependants lay with the Public Works Department Officer in charge of the work.

74. The poor-house ration was as under :—

	For an Adult.	For a Child.	
		Between 8 and 12.	Under 8.
	Ozs.	Ozs.	Ozs.
Grain	15	9	7
Dál	2	1	1
Salt	½	⅛	⅛
Sweet-oil	½	¼	¼
Condiments and Vegetables ...	½	¼	¼

The grain used was rice and jowár.

The ration varied occasionally to meet the case of sickness or weakness.

75. The village gratuitous relief lists were prepared by the village officers in the first place, and checked by Circle Inspectors and the Mámlatdár and by other superior officers.

The recipients were inspected at least once a week by the Circle Inspectors, about once in a month by the Mámlatdár, and occasionally by superior officers.

76. The relief was given in the shape of grain daily at the village chowra or any other convenient public place in the village.

77. Gratuitous village relief in the shape of dole was given to the following persons not mentioned in the Famine Relief Code:—

(*a*) To *bona fide* agriculturists and others who had some good excuse for remaining in the village, such as to take care of cattle or to begin cultivating the land, under the Commissioner N. D.'s Circular No. 7125, dated the 23rd June 1800, from July 1900 to October 1900, both inclusive.

(*b*) To non-working children of workmen who would have to be fed in the kitchen if they accompanied their parents in case they were attending a school, from March 1900 to October 1900, both inclusive.

(*c*) To persons who left relief works on account of cholera when in danger of starvation. This was done under the orders contained in Government Resolution No. 2179, dated 8th May 1900, Famine Department. Upon the authority of this Resolution, instructions were issued to Circle Inspectors, but there were only a few persons who were thus put on dole, and these few also were kept only for a short* time on dole as such fugitives, inasmuch as they either returned to the relief works or took to agricultural work with the assistance of tagávi or dole ordered to be given to the agriculturists.

(*d*) To labourers on relief works who could not work on them owing to heavy rains and who could not be provided water-proof shelter, if they

* June 1800.

returned home, under the authority of Government Resolution No. 2945, dated 27th July 1900, Famine Department. These people were very few, inasmuch as all preferred to stay on the work and get wages without doing almost anything.

78. The cooks employed were Bráhmins, Pátidárs, Káchhiás and Rajputs. Reluctance to take food in the village kitchens was shown by agriculturists of the Pátidár, Rajput, Káchhia and superior castes and also by the Mahomedans, but the destitute infirm of all these classes did not show any reluctance.

As regards the kitchens on large works, most Pátidars, Rajputs, Káchhias and other superior caste workmen did not send their dependents to the kitchen to take their food: they managed to do without such relief.

79. Village officers were in charge of the civil kitchens, and the Special Civil Officer was the person in charge of the kitchen on a large public work, a kitchen superintendent being appointed under him. All superior officers of the Revenue and Public Works Departments supervised them.

80. Only one cheap grain shop was opened in the táluka: it was in Jambusar Town, and was opened on 27th August 1899, and was closed on 18th December 1899, when more than one large relief work were open to the poor. It was open to all sorts of persons who chose to ask help, but it was mainly taken advantage of by the poor of the Jambusar Town only. Several private gentlemen of Jambusar Town managed this concern, which depended for its existence and maintenance on their charity. It helped a good many persons and cost Rs. 1,625. Grain was purchased from the Jambusar bazár at the bazár rates, and sold at cheaper rates to the poor at the shop.

81. The shop in no way discouraged the importation of grain; it did not obtain grain from outside, and did not appreciably affect general prices.

Suspensions and Remissions of Land Revenue.

82. The total land revenue demand of this táluka for the year of famine 1899-1900 was Rs. 4,84,413. Out of this, Rs. 95,426 had been proposed to be collected (Rs. 46,733 from 1,451 non-agriculturists and Rs. 48,693 from 306 well-to-do agriculturists), Rs. 2,73,987 to be suspended, and Rs. 1,15,000 to be remitted. Out of the amount to be collected, Rs. 42,022 were collected during the year.

83. During the year of famine suspension of land revenue was granted to all except—

(1) Certain people who were made to pay, and

(2) Certain other people who were remitted their revenue.

Under class (1) were the following :—

(*a*) All non-agriculturist occupiers, whether Khátedárs, sub-sharers, vendees or mortgagees with possession.

(*b*) All *bona fide* agriculturists, of whom it was definitely known that they were in such circumstances as to be able to pay without endangering their position as landholders. [In no case was a person to be included in this class on general impression. Definite facts as to his condition were to form the basis of action, and in any doubtful case he was not to be so included.]

Under class (2) were certain individuals in those particular villages which had frequently suffered in previous years and were in a depressed condition before the famine began, such as the Báhra villages and others. Remissions in such villages were given to particular individuals only, *i. e.* those who fulfilled any of the four conditions noted below :—

(*a*) They or members of their family being jointly with them have resorted for no less than one month to a relief work at a distance of not less than five miles from their home.

(*b*) They themselves in person have been on the village dole for a similar period before the end of June 1900.

(*c*) They have received a free grant of money from the Central Relief Fund.

(*d*) They have lost at least half their plough cattle during the past year, and have not more than one bullock left.

It will be seen from this that the remissions and suspensions did not solely depend upon the failure of crops, but upon other facts also—testing the general capacity of the individuals to pay. This general capacity was to be determined in the first place by the village officers, but it was to be examined carefully by the Mámlatdár and tested by the Assistant Collector.

84. Suspensions and remissions were determined after the collection of revenue began for the year.

86. Sufficient relief does not seem to have been given by the proposed remissions, which may be ordered uniformly in *all* villages; the tests of incapacity will work equally safely in every instance. If those who went on relief works from certain (depressed) villages are to be given remission, similar persons elsewhere also deserve a similar grace.

I have observed instances where the relief has been abused.

General.

91. Facts did come to my notice indicating a contraction of private credit; and except in the case of Vohoras I did not see any instance of the reluctance of the people to exhaust their own resources before accepting State relief.

94. Registration of births and deaths is done by village officers: in the case of the workmen on

large works, it was done for a time by the village officers of the village in the limit of which the work was situated, and later on by the Special Civil Officer on the work.

98. There was a regular inspection of the grain shops on the works by the Special Civil Officers and others, and it occasionally disclosed the sale of inferior and unwholesome grain.

99. A few poor people of the Koli and inferior classes supplemented their food with wild products, but I do not think that alone had any effect on their health.

100. I believe the immigration from Native States was much more than it is officially reported. On the Dábha and Jambusar Tank works immigrants formed at least 10 per cent. of the workmen.

102. A few orphans were handed over to their relations who came to claim them, or were traced, towards the close of the famine. The Baroda State orphans were handed over to the Baroda authorities, and a few others were sent to the head-quarters of the district to be kept in the poor-house there and disposed of under the orders of the Collector. There was an instance here and there in villages where either the patel or some one else—a neighbour or a friend—took charge of an orphan. No orphan was made over to a native institution or to a missionary.

105. There were no employers of private labour, agricultural or other, who experienced difficulty in obtaining labourers in the course of the famine year. The agricultural employers, whoever they were, generally utilized the services of all their own family members, of poor relations and of poor dependants, of whom a lot could be collected at any time; and the other few employers that were could likewise get labourers without the least difficulty. It may be said that labour was rather cheaper in the famine year than at other times. But when the agricultural operations began in the monsoon of 1900, there was a complaint from agricultural employers in some places that they could not get labourers, inasmuch as several persons of the labouring classes preferred to hang on the works and draw their wages.

106. There has been no change in the character of the crops sown of late years.

107. The wages of agricultural labourers in this táluka are paid partly in cash and partly in food, that is to say, one meal is given to the labourers in the shape of juvár or bájri bread and a sufficient quantity of vegetables or condiments, and 6 pice are given in addition. There is no tendency to change the food part of the wages for cash.

Wages have not increased of late.

GOPALJI GULABBHAI,
Mámlatdár,
Táluka Jambusar,
District Broach.

MR. ADARJI M. DALAL, LANDOWNER.

The President.—Are you a non-official?

A.—Yes.

Q.—On what points can you speak?

A.—I had charge of a poorhouse and constantly visited certain famine works, I can speak upon the assessment and general condition of people.

Q.—I suppose you have some advice to give as to the result of your experience?

A.—We had provided poorhouses in Broach, we found that there was a large influx of wanderers and thought it advisable to start a poorhouse; it was not a regular poorhouse; in the beginning we gave the people cooked food and they went to their homes.

Q.—How many people were there?

A.—About 300 people came every day.

Q.—Did you exact any labour?

A.—We simply employed them in making bread, drawing water, grinding corn, and such things.

Q.—No remunerative work?

A.—No.

Q.—Were they old people?

A.—Mostly. If able-bodied persons came we gave them food once and drafted them to work. We had a hospital also.

Q.—What was the mortality like?

A.—Very high; in fact people came there to die; but it compared favourably with Government poorhouses.

Q.—Do you ascribe that to the greater care that you could exercise?

A.—Yes, certainly; and there was no restriction of food as in the Government poorhouses.

Q.—Your rates were more liberal?

A.—Yes.

Q.—The medical arrangements?

A.—They were excellent.

Q.—How long did you keep your poorhouses open?

A.—We started in the month of April and closed in the month of November.

Q.—You had 300 inmates and you relieved Government to that extent?

A.—Yes.

Q.—How did the general administration strike you?

A.—It struck me very favourably.

Q.—Did you think the Public Works Department was as good as it might have been?

A.—I did not pay much attention to that.

Q.—Did you travel among the villages?

A.—I went to the Materia and Asa tanks.

Q.—Did you visit the Asa tank after the reduction of wages had taken effect?

A.—No, I went earlier and found the people in good condition.

Q.—As far as you know were there any people who might have got on at home?

A.—No, except perhaps a few *Borahs*. I visited the tank in December and then in January.

Q.—Did you enquire what the wage was?

A.—Yes.

Q.—Was the wage that they got the full Government wage?

A.—In the beginning the wage was full. I heard complaints after the wage was reduced, that is about February and March; we had then a great influx of workers into our poorhouses.

Q.—On account of the reduction of wages?

A.—Yes, they said they got under Re. 0-1-6 and as grain prices were rising they could not maintain themselves.

Q.—Did they come in an enfeebled condition of health?

A.—Yes.

Q.—Did they come in larger numbers than you could receive?

A.—Yes, we had to refuse admission; they said they came from the Materia tank.

Q.—You had no reason to doubt their word?

A.—No.

Q.—After a time did things get better?

A.—No, distress became greater.

Q.—In the neighbourhood of your town?

A.—Yes.

Q.—And do you connect that with the reduced wages?

A.—Yes.

Q.—When did things begin to right themselves?

A.—The state of affairs was the same even after the restoration of the wage; even the restoration was not sufficient to make the people stick to the works.

Q.—Would you have advocated an increase of wages?

A.—Yes, certainly a slight increase, the margin is hardly sufficient.

Q.—Is it your meaning that the people during the reduction had suffered so much that they required more than the full wage to bring them up again?

A.—Quite so; the root of the evil is the very high rate of assessment; if the assessment had been pitched at a moderate figure the people would have been able to save something.

Q.—You consider the high rate of assessment is one of the reasons why people have not been able to resist famine; what is the assessment on the gross produce?

A.—31 to 33 per cent.

Q.—We have it from several witnesses that it is not so high? Mr. Mehta went into much detail and stated that it was about 20 per cent.?

A.—My belief is shared by other landholders, I have taken special care to consult these people, my figures are borne out by the experience of others.

Q.—Other landholders?

A.—Yes.

Q.—Are you a landholder?

A.—No, but I manage the lands of an Institution, the assessment I can say is unduly high.

Q.—In your calculations do you take into account what portion is under sugarcane and non-food crops?

A.—Sugarcane is not cultivated. I take cotton into account.

Q.—Your district is a fertile one?

A.—It is believed to be very fertile, but the soil has been deteriorating for many years.

Q.—What is the produce of an average acre of cotton?

A.—I take a model field of six acres in which would be grown three acres of cotton, two of *juári*, and one of wheat: it comes to Rs. 20 per acre of cotton.

Q.—Does that include bye-products?

A.—Everything. I make it at Rs. 22 for two acres of *juári* or Rs. 11 per acre and Rs. 14 for an acre of wheat.

Q.—This is not in accordance with my experience at all. The agriculturist could not pay in that case?

A.—He does not pay: there is very much indebtedness.

Q.—I cannot accept these figures, they are not in accordance with credibility; at those figures the people would be all starving and Gujrat has been said to be the garden of India?

A.—That is a wrong impression. These figures have been arrived at in consultation with many persons, I am not a practical farmer myself. I have taken special pains in arriving at these figures.

The President.—I do not think it is right that these figures should be taken on the record without an expression of my inability to accept them. In the northern parts of India which are not so fertile they would be rejected.

[*The witness subsequently sent the following note*:—]

The land assessment in Broach is unduly high, and this high rate is due to the impetus given to cotton cultivation by the American civil war, which enhanced the price of cotton. It was about that time that the last survey was made. Since then American receipts have grown by leaps and bounds and brought down the prices of the Indian staples, especially Broach, which of all other staples nearly approaches in quality to the "New Orleans." For a time a temporary help was given to the market by a heavy fall in exchange and in the cheapening of the cost of transit to Europe, the eastern parts of China and Japan, and in the increased local consumption by the extension of the mill industry in India. Exchange has once more steadied up by the closing of the mints and the introduction of the gold currency and simultaneously with these, American receipts have grown to exceed a *crore* of bales, while Indian consumption has remained stationary. Central Asia, China, and Egypt are gradually coming to be recognized as factors in the cotton markets of the world, and consequently Indian cottons—Broach and Surat especially—have lost their place and are declining in prices. Exportable food grains, such as wheat and other produce, and seeds have also received a check by the rise in exchange, so that it will be perceived that the last assessment was based on the temporary fillip given to the cotton industry, and as that impetus no longer exists, the effects of an unduly high assessment are disastrous to the *rayats*.

Although 20 per cent. on the gross produce of land is a very high rate of assessment and in itself requires to be considerably reduced, and although this rate is admitted by the witnesses as experts before the Commission, this belief or opinion is not shared by the *rayats*, who are practically acquainted with the agriculture of the district and are occupied in this business. It must be observed that since the last 10 years there has been a gradual falling off in harvests until in the three or four years before the famine all Government witnesses without a single exception declare that produce has been either half or two-thirds of the normal resulting in a contraction of agriculture, accentuation of distress, thinning of the population in certain tracts of the district, and in an increasing relinquishment of holdings.

This is due to the following causes:—

(1) fall in prices;

(2) gradual deterioration of soil by want of manure, and want of means to fertilize land by manure, which is used as fuel on account of preservation of forests and forest lands;

(3) fallow lands having also to pay assessments cultivators are obliged to till them, but the soil being weedy and at the same time exhausted, requires labour to clean it by killing them by turnings over and rest to recuperate productive powers. Consequently they are not properly cultivated and crops raised are very poor.

In pre-survey times all fallows were exempted from assessment. In the Broach revenue inquiry now going on it has been ascertained that nearly one-tenth of the *inámi* alienated lands have been relinquished by their holders as they are unable to pay assessment to Government which is lighter than on Government *kháta* lands. It is not so much the strict rigidity or harshness of collection of land revenue as the crushingly heavy rate of assessment that presses most severely on the agricultural population of the district. People who are interested in land revenue and agriculture hesitate to believe that the alluvial golden soil of this district yields such a poor return as to be unable to pay Government assessment, and this popular belief has led to a meting out of tardy justice to the impoverished and demoralized *rayats* of this once fertile district. On account of the impetus given to cotton cultivation during the American civil war, land had considerably risen in value, and land investments were considered to be as " good as gold edged " securities. Land is now a drug in the market, and the *zamíndárs* who have either bought land from the market or from Government public auctions have been hopelessly ruined. At first poor *rayats* were squeezed out, and now misfortune has overtaken the consolidated large landholders ; the rate of assessment is about Rs. 4 to Rs. 5 per acre, and as worked out by practical farmers the percentage of gross produce to assessment comes to about 26 to 28 per cent. against a Government average of 20 per cent., which also is admitted to be very high. The incidence of taxation per head of population of the fully assessed area (area about five lakhs of acres ; revenue, 22½ lakhs ; population 340,000) is Rs. 8, which is very heavy compared to any district, any province or any *taluq*. It will be further noted that Broach grows only one precarious crop, either *kharíf* (cotton mostly) or *rabí, juári* or wheat, which is solely dependent on a timely rainfall and a seasonable monsoon. It has no facilities of any kind for an irrigated crop as in Kaira, some parts of Ahmedabad, and some of Surat, in which tobacco and sugarcane plantations are profitable. The peasantry is hopelessly indebted and, according to my knowledge, nearly 80 to 90 per cent. are in debt. They cannot save in good harvests as the surplus produce, if at all, is retained by the *sowcars* in payment of debts. In indifferent seasons they are supported by the *sowcars* by making advances for seed, bullocks, and subsistence ; but in consequence of a succession of bad harvests culminating in the last disastrous famine, the condition of both has become unfortunate. They are less able to resist a famine than the Deccani, who, however impecunious, has some reserve of food grain and fodder to fall back upon and tide over a crisis. There is a better understanding in Broach between the *sowcar* and the *rayats* than in other districts, and the former is not considered to be exacting or obnoxious, to the latter ; and as I am informed 9 per cent. interest is considered on land to be a fair rate in Broach and a higher rate is more an exception than the rule ; and yet for want of ability to pay distraints and forfeitures are commoner now than before, and a perceptible increase of relinquishment of holdings is noticeable in certain *taluqas* of the district. The root of the evil is the high rate of assessment which is admitted by Government, but not relaxed. From the figures available which have been checked by experts and pronounced to be approximately true, I am able to say that nearly half the area of the district is under cotton cultivation, one-third under *juári*, and the rest under wheat and other food grains. Now we will take a field of six acres as an illustration in point—

3 acres cotton, raising uncleaned cotton crop of 15 *dhadis* (average of Bara and Broach), equal to about 10 Bengal maunds, or say, 3⅓ Bengal maunds of cleaned cotton, of the value of Rs. 60 to Rs. 63 ;

2 acres of *juári*, raising about 11 to 12 Bengal maunds, of the value of Rs. 22 to Rs. 24 ;

1 acre of wheat, producing about 5½ to 6 maunds of produce, of the value of Rs. 14 to Rs. 15—

i.e. to say a field of six acres producing a crop of Rs. 96 to Rs. 102, say Rs. 17 per acre, taking assessment to be about Rs. 4 as the average of Bara and Broach lands the percentage of gross produce will come to 24 per cent. ; but in many cases it approaches to 29 to 31 per cent. In 1897-98 I am informed that out of 31 experiments, one shows the incidence at 42 per cent. and in six it was over 30 per cent. In the report for 1896-97 crop experiments were made : one of them gives the incidence at 96 per cent. ; one at 73 per cent. ; one at 63 per cent. ; and one at 50 per cent. Omitting these high exceptional percentages, and excepting the mean of the Government witnesses and the agriculturists, I may safely rely on my figures of 24 per cent. on gross produce.

It is believed that the relief caused by a reduction in the assessment will not reach the *rayats*, and that the *sowcars* will get all the benefit of the concession. I think the belief is based on misconception, for still a good part of the land is in possession and registered occupancy of the *rayats*, and those that are mortgaged carry rent in the shape of interest, and therefore naturally a reduction in assessment will relieve the *rayats* to that extent. Summarizing the above, I would submit that a material reduction in the rate of assessment all over the district in every *taluqa* is absolutely necessary, and that in cases where lands are allowed to remain fallow for killing weeds, &c., should get some relief in the shape of partly remission and partly suspension. If such a liberal policy would be carried out, it would not only make people resist better the effects of future famines than now (when a third of the entire population of the district was so resourceless as to be thrown on the generosity of the State relief which was very liberal) ; but it would set up agriculturists by allowing them to save for a rainless day to make them more self-denying and resourceful.

Mr. Adarji M. Dalal.

Replies by Mr. Adarji M. Dalal to the questions drawn up by the Famine Commission.

1. The outlook in the Broach District, when the rains commenced in the June of 1899, was normal. We had 7 inches 54 cents. of rain in that month and the past year's rainfall (47′ 04″) led every one to hope for a normal monsoon, which failed.

The preceding two years in point of rainfall were fair (1898—47′ 04″ and 1897—44′ 87″), but the years were very lean. The crops raised were very poor. Both cultivators and savkárs for the last 3 or 4 years, before the year of famine, have been complaining of poor harvests in spite of an average rainfall in those years.

3. (*a*) I beg to attach a table of the rainfall for the last 25 years in the Broach City as gauged from the offices of Messrs. Greaves, Cotton & Co., which shows that the average for the first decade is 41 inches 77 cents., for the second decade it is 40 inches 47 cents., and for the whole period it is 40′ 74″.

(*b*) The actual rainfall in 1899 was 8 inches 82 cents. It represents one-fifth of the average or, say, 20 per cent.

(*c*) The rain ceased practically on the 26th of June, when it totalled 7′ 54″. In July we had only one wet day, a shower registering 18 cents. In August we had a few showers, registering 90 cents. in 6 days, and in September, from the first to the sixth, we had a few drizzles, measuring only 20 cents.

(*d*) The distribution from June to September, compared with the normal, was—

For June, 73 per cent. of the normal average.
„ July, 1 per cent. „ „
„ August, 10 per cent. „ „
„ September, 3 per cent. „ „

Rainfall in the City of Broach from 1876 to 1900—

Year.	Rainfall.	Remarks.
	In. cents.	
1876	33 77	First Famine, Madras and Southern Deccan.
1877	20 99	
1878	64 54	
1879	39 40	
1880	50 95	
1881	40 01	
1882	40 50	
1883	42 75	
1884	49 49	
1885	35 38	
	417 78	Average for the first ten is 41·77.

746

Year.	Rainfall.		Remarks.
	In.	cents.	
1886	41	83	
1887	36	16	
1888	18	87	
1889	35	04	
1890	27	70	
1891	56	84	
1892	38	83	
1893	52	08	
1894	68	06	
1895	29	36	
	404	77	Average of the second decade is 40-47.
1896	62	73	
1897	44	87	2nd Famine, Deccan.
1898	47	04	
	154	64	Average of 3 years preceding Gujarát Famine, 51·55.
1899	8	82	3rd Famine, Gujarát and the Deccan.
1900	32	44	4th Famine, Deccan and Gujarát, partial.
	1,018	45	Average of 25 years is 40·74.

12. A large amount of money was raised by public subscriptions, from which Rs. 15,807 were raised. A liberal donation of Rs. 5,000 was given by the Mahájan Fund, and the native merchants agreed amongst themselves to pay a voluntary tax levied on themselves, which contributed Rs. 4,000 towards the fund, thus raising the total to a sum of Rs. 24,422-2-3.

A meeting was held in which the then Collector, Mr. P. R. Cadell, presided, and a committee was appointed, comprising of official and non-official members, to conduct the local charity and to judiciously disburse the funds. The chairman was the Honourable Ráo Bahádur Chunilal Venilal, C.I.E., with two joint secretaries; meetings were held every week, in which resolutions were passed, accounts of the previous week's transactions were examined and fresh sums were voted for necessary charitable objects. Audits of the accounts were made by independent private gentlemen.

The system of co-operation of the official and non-official classes worked excellently, as the advice and experience of the former, supplemented by the local knowledge and influence of the latter, not only contributed to the raising of a large local charity fund, but also to its being most economically managed without waste in judicious and discriminate charitable objects. Government officers coming forward to work with the private gentlemen of the city, the wants of the people were brought to the notice of the former, and relief of distress was speedy. The active management was fortunately left in the hands of the private gentlemen, who were better fitted to

ensure economy or to prevent waste. The official classes formed a sort of advisory board, and by constant visits and interchange of views and opinions, both worked harmoniously together, with satisfactory results.

I am humbly of opinion that Government should ask for the private agency more freely in all future programmes of famine for supervision, checks on the tendencies of inferior and subordinate servants to corruption; in kitchens, poor-houses, grass depôts, distribution of money or grain doles, payment of tagávi loans, not only in the city but in the villages, by creating small Panchâyet boards, which should have the assistance of Government servants. If properly guided and under a genial superior officer, native private agency is the best agency, in my opinion, to prevent a waste of funds. In this connection I may be permitted to observe that it is alleged that native private gentlemen, as a rule, do not come forward to help the operations. The complaint is true; but it is not due so much to their want of sympathy with the movement as to their fighting shy of joining a movement in which their feelings and status are not adequately considered, and in which they do not like needless interferences or a map of forms of accounts and vouchers to keep and sign.

The form of local check and control was instituted during the commencement of the famine in October 1899.

12 (*d*). In the city (Broach) towards the end of March the Commissioner, N. D., whose camp was kept in Broach for a long time, being centrally situated, issued a general circular to the Revenue, Police and other departments and invited private gentlemen also to go about the streets and lanes to find out cases of destitution and emaciated famine-stricken people to be taken to the poor-houses. He had caused specially fitted doolies to be made, which were kept in every Police chowky, and the doolie-bearers were ordered to move about in search of sick cases to be carried to the poor-houses. It was a simple but most speedy method of relief, and every day a large number of people were relieved. It was a well-though-out scheme and saved many lives, as also it helped Government servants and private persons to observe the condition of the people. As it is an important circular order and one which may be carried out in all famine campaigns, I beg to quote its number and date, No. 3554, dated 31st March 1900, from Surat, and which I beg to annex to this answer in original, as received from the Commissioner's office, for ready reference.

No. 3554 of 1900,

Camp Surat,
31st March 1900.

CIRCULAR.

Numerous deaths occur among people who wander about the country without food and are attracted at last towards some town or large village. Ignorant of the relief provided by Government or unwilling to go to it, they linger on the road-side or in the fields until they die of starvation. This is

not only in itself a regrettable loss of life, but it creates a public scandal and discredits the arrangements made by the local officers.

2. The Commissioner thinks a rough ambulance system should be established at every poor-house and kitchen (whether on a relief work or not) and at every town or large village where there may be no poor-house or relief work, but where famished vagrants are likely to be found.

3. At all these places as many stretchers as may be needed should be kept. They can be made very easily and cheaply of 2 stout bamboos and a piece of canvas. They are kept already in many places, but they should henceforth be part of the regular equipment of every poor-house and kitchen—as much as the hutting—and should be charged to the general cost. In places where there is no poor-house or kitchen they should be kept in the chowra or other public place and their trifling cost may be defrayed out of the Collector's grant for gratuitous relief in villages.

4. The bearers should be provided as follows:—In kitchens on relief works a sufficient number should be told off to each stretcher from the relief workers. In poor-house a sufficient number should be added to the staff to man the requisite number of search parties, and charged to the general establishment. In Municipalities which contain no poor-houses and especially in those near which there is a relief work kitchen, the duty of keeping up a sufficient number of bearers fairly belongs to the Municipality, who should be asked with the least possible delay to organize search parties and have exhausted wayfarers carried to the nearest place where they will be attended to. In some large villages the system should be introduced, though there is no Municipality or poor-house or kitchen near. Then after giving a dole to the patient, if necessary, the Patel should send him on a stretcher with bearers to the nearest poor-house or kitchen with a chit which will entitle each bearer to 2 pice *per mile* out of the Superintendent's or Special Civil Officer's permanent advance.

5. For every poor-house or kitchen in or near a Municipality certain areas all round the town should be roughly indicated and they should be examined at fixed intervals by search parties consisting of bearers with one or two stretchers accompanied by some respectable person. The Mámlatdár can arrange with the Municipal Commissioners to undertake this task—one or more to each area, or failing Municipal Commissioners, he may induce other benevolent men to take it up. Each area should be searched every other day or more.

6. In villages the Patel should have the fields surrounding the village searched every day.

7. On relief works it will perhaps be impossible to organize search parties, but it should be impressed on all the staff that they should report any person they may see or hear of in extremity to the Special Civil Officer, who shall at once send out a stretcher with bearers.

8 Care should be taken not to relieve in this way any except those who are really exhausted and in danger of starving to death.

F. S. P. LELY,
Commissioner, N. D.

No. 3709 OF 1900.

Camp Broach, 4th April 1900.

Forwarded to Mr. Adarji Mancherji Dalal, Broach with the compliment of the Commissioner.

HOPE L. CROSS,
Commissioner, N. D.

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14. Irrigation wells can be made in the Broach District, but in certain tálukas only such as Anklesvar and a part of the Broach Táluka. In the rest the geological formation of the soil is unsuited for that purpose, especially in the Bara part of the district, where it is difficult to sink wells even for drinking purposes, as the whole tract is salty. When sweet water was obtained it was not wholly successful in securing the crops on the ground, as the flow and yield of water was insufficient.

(*b*) In my opinion for a district like Broach the sinking of wells was not much of a success as a permanent improvement.

(*c*) It was successful as a temporary measure to employ labour. But the soil being soft, kacha wells were useless after some time, as they required a large amount of money to construct into permanent masonry-built ones.

32. My experience leads me to agree with the Famine Commission of 1898 that a system of payment by results was wholly unsuited to conditions of actual distress or a severe famine. It may answer if the works are opened throughout the district early in time. But, however, early works may be opened, such a hard and fast rule should not be enforced, as it keeps the people away from the works and results in aimless wanderings, the principal cause that contributed to such a heavy mortality.

34. The scale of wages, in my opinion, was adequate in the beginning. It was never unduly liberal. Towards the middle, when it was reduced, it was inadequate. Its effect on the workers was that when it was reduced large numbers left the works, and an influx of poor wretched souls flocked to the city and the poor-houses. Its ill-effects were not so glaringly perceived at once, as Rangoon rice was fortunately cheap and abundant, and an adult male could satisfy his hunger in one pound to a pound and a quarter of rice, as that quantity of rice, after being boiled, was enough to fully satisfy hanger, but it had no staying powers. Had Rangoon rice been as dear or dearer than jowári, the staple food of the district, and if the people had had to buy jowári instead of rice, the shrinkage in the wage allowance would have been perceived at once. Workers on full meals of rice fell off in health gradually.

The workers, on account of the reason mentioned above, did save a little in the beginning when the wage was not reduced, as it allowed them to subsist on rice ration and save a copper or two. But this

saving had the contrary effect of undermining their health, by which Government had to maintain some of them after some time on gratuitous doles or poor-houses without getting any work from them. Government should not count the bare cost of the quantity of grain alone to subsist, as workers required condiments, oil, fuel and tobacco. People used to subsist on short rations to save a few coppers for these things. It has been my experience that every man, whether on works, on gratuitous doles in kitchens or poor-houses, could not do without his smoke or biddi. He or she, and even small boys and girls, would rather go without a scanty ill-nourishing meal than forego the tobacco; so that, in fixing the scale of wage, it should leave something for this indulgence, which is as necessary for their wants as their food, and without which greatest suffering would prevail.

59. From my experience I am of opinion that it is highly desirable of extending small village relief works for the following reasons:—

(1) If relief works could be opened in convenient centres to form groups of villages, which could allow the villagers to come to the works and return to thier villages, it would give the poor workers home comforts, safety from exposures in the cold, rains or heat.

(2) Deprivation of home comforts and ties has an injurious effect on their minds and their constitutions.

(3) Sanitation, water, conservancy and other precautionary measures for preventing epidemics can be more properly taken in hand in small works than in large congregations, preventing sickness and a large mortality.

(4) On the score of economy for supervisional checks, if head-men and Patels of villages were made responsible for the work and payment of wages made under proper check and control by Civil officers and Famine Mámlatdárs, the system would be a decided gain over large works where supervision, however vigilant, could never cope with the system of corruption in vogue. Proper sanitation, water conservancy for a large camp of 20,000 people, is almost an impossibility, especially when the filthy inborn habits of the people are concerned.

(5) When an epidemic breaks out it creates a panic and the workers fly the camp to other parts, endangering neighbouring villages and towns. This is prevented in small village works. A case of cholera or other contagious and infectious disease is at once checked and segregated, and even if the camp is decided to be closed, people have their own homes to go to, and the camp can be broken up and another opened in its place at small cost.

(6) People can be made to work in fields in turning the soil and in other improvements and

preparations for the next crop, so as to be better able to raise larger crops than when engaged on large works at a great distance, from which they are likely to neglect their fields.

(7) Large congregations of the lower classes of people in a famine year for a continuous period are a standing menace to the health of the adjoining tálukas and the whole district; and the high mortality that prevailed in the famine was due in some way to this concourse of people.

63. No special measures, either by Government or by private individuals, were taken to relieve artisans (weavers, &c.,) in their own crafts—this absence of relief caused much suffering in the principal cities and táluka towns. In the city of Broach there is a large class of Mahomedan hand-weavers, who make coarse cloth, towels, napkins, coloured sheets, quilts, &c. They had lost their trade by famine, as the foods were unsaleable and the raw material was scarce, both being the direct result of the famine. Poor Mahomedan women had in this the only means of subsistence, and they felt the deprivation most acutely. The Bombay Famine Committee kindly allotted a liberal grant of Rs. 6,000, which was supplemented by corn and money grants from the wealthy Mahomedan gentlemen of Bombay for this class, which helped to tide over the crisis; otherwise they would have been starved to death.

In relief works provision should be made for this class of people who are addicted to in-door work, are physically inferior to the other out-of-door workmen and who by habit and occupation are confined to cities and táluka towns. Under private committees, if works could be opened, they would not result in loss. Of course, a large amount of money would have to be locked up for some time, but when prospects improved woven goods could be sold at fair prices; the city of Broach has 4 spinning and weaving mills, and throughout the district there are a store of ginning factories and presses which were all wholly or partly closed, throwing out of work nearly 13 to 14 per cent. of the city population (40,000).

In this connection I beg to quote a portion of my "Note" of evidence submitted to the Famine Commission of 1897. This evidence relates to Sholápur, but some of the facts and principles are applicable to any district where the weavers and other craftsmen are affected. I beg to transcribe a certain portion from that evidence :—

The weavers more liable to be affected during a famine, and why?

Sholápur and nearly the whole of the Deccan has a large weaving population in the principal cities and large villages, and during the famine they are very easily affected. The city alone contains a weaving population of 20,000 souls out of a total of 65,000. Having been inured to in-door work and city life with its attendant evils, they are in times of scarcity liable to be emaciated and fall off in health quicker than any other class. Their trade is suspended, and they are at once thrown on the charity of the public or Government relief works. It was at first believed that they would not go to these works and would have to be gratuitous-

ly maintained or large weaving sheds opened to give them work. It was found, however, that in the absence of their legitimate trade, those that were able-bodied did go to the relief works and tanks, &c., but a good part of them were thrown on charitable gratuitous doles. Here I would respectfully observe that as this class of people are very weak in physique and constitution, Government cannot get any reasonable value of their money by their employment on such tank work, and out-door piece-work is uncongenial and unfit for their condition of health. A programme should therefore be arranged to give them work in their own trade. A weaving shed was opened under the Sholápur Municipality, and Mr. and Mrs. Weir, the present Collector of Sholápur and his wife, took a great interest in relieving this particular class of people. In my opinion, if they are paid on piece-work and sheds opened in convenient areas and in groups of villages, the works would not result in any loss, but would be self-supporting. By the courtesy of the District Officers I was allowed to have a look at the accounts of the working of the municipal shed, and I find that it has resulted in some profit, of about Rs. 100. The total number employed was about 12,423 (6,881 males, 4,537 females, 1,005 children); men earned from 2 to $3\frac{1}{2}$ annas, females $1\frac{1}{4}$ to $1\frac{3}{4}$, children $\frac{3}{4}$ annas. It is true that a large amount of supervision, control and capital would be required if such works were to be undertaken on a large scale, and the difficulty of moving the woven goods would also come in the way of their success, as in times of famines such articles have no buyers and demand is slack. But with experienced committees composed of citizens whose expert knowledge and experience can be made use of under European control, they are likely to prove more useful than compelling these workmen to go to road-making and other arduous manual work for which they are not brought up and which they find irksome. In Ahmednagar, Násik and Bijápur also (famine area) there is a large weaving population, and Government may well appoint a committee to report on a future well-thought-out scheme or programme to be made use of in future famines.

Opening of weaving sheds advisable as relief works.

64. This question is answered in my answer to the Question No. 63.

65. It is partly answered in my Answer No. 63. Special relief measures were not taken for the artizans in this district, and in the absence of them I cannot say what the results would have been from the point of view of economy and relief. But from my experience of the Deccan famine, where this kind of relief work was opened by the Municipality in Sholápur, I can say that, had such works been started in Gujarát, they would have relieved really deserving craftsmen whose condition becomes worse than that of any ordinary out-door labour, as he is physically too weak, being inured to in-door work, to go to the general relief work of tank-digging or road-making. Under careful management of the local citizens such works are absolutely necessary to be started by the Municipalities, and in absence of these they should be included in the list of relief works undertaken by the State.

66. A large tract of grazing ground was opened, free of cost, in the Thána forests for the Gujarát cattle, and tagai advances were given to the *boná fide* cultivators to transport their milch and field cattle by rail to that forest. Railway fare was reduced and a large percentage of the district cattle was sent there. But the result was not successful. Gujarát cattle being soft-hoofed and not inured to hilly and

stony tracts, a large number of the sent died there. We had sent 137 heads of cattle from our Pinjrapole. They were selected by Government officers, as we had agreed to part with the cattle to cultivators after the famine for field-operations. Nearly more than a hundred of our cattle perished, although we had taken special precautions to keep 3 watchmen and had incurred an additional expense to have the grass cut and stocked there to be given to our animals in April and May. Other owners had the same experience. But at the same time those that remained in the district did not meet with a better fate. Mortality was very heavy in the district also.

Grass depôts were established and grass imported by Government and sold to the cultivators at a cheap price. This answered very well, and had it not been for this relief a larger mortality would have occurred.

Cattle camps were started, in which bullocks were admitted from cultivators and kept and fed at Government expense, on condition that the owners paid to Government a certain sum when they asked for them again. The mortality in the camps was also high, due to insufficient quantity of hay allowed per each head of cattle, and chiefly to the quality of grass being very poor. An ordinary bullock requires about 15 to 20 lbs. of good hay of good quality per day to keep him in fair condition. On the whole, the measure adopted did certainly help to save many cattle.

67. Compressed grass was imported from Khándesh and Thána by Government in the grass depôts. Railway fare is prohibitory for hay, inasmuch as the quantity stacked in a truck is not much and the fare is for the whole wagon. To ensure economy an improved method of hand-presses should be adopted, or hay should be pressed by steam-power. Bales pressed in cotton steam-presses contained a larger quantity of grass, and consequently paid less fare than a hand-pressed bale. But it is difficult to get steam-presses when and where they are required. It has been abundantly proved in this and the 1897 Deccan Famine that a larger percentage of the cattle would have been saved if grass could have been imported into the affected tracts at a less cost. Economy could be assured.

(*a*) by using improved hand-presses;

(*b*) by erecting temporary steam-presses;

(*c*) by a still further reduction in the railway tariff;

(*d*) Close-pressed bales can be carried more cheaply by boats where water communications are available.

In this connection I beg to annex a portion of my evidence before the last Famine Commission :—

Intense scarcity of fodder a feature of this famine.

A scarcity of fodder was most acutely felt in this famine, resulting in a serious sacrifice of a large percentage of the agricultural stock. Unfortunately for Sholápur

there are no large reserved areas for allowing cattle to graze, and the cost of sending them to Khándesh and Násik forests would be very heavy. Government, I am respectfully of opinion, should form a distinct programme as to how this scarcity is to be overcome in future. During the beginning of the famine we bought some Government hay consignments and retailed them under cost price to the cultivators, and even transmitted bales to Bársi and Pandharpur and other inland tálukas by country carts. We imported several consignments of hay from Gujarát, and also retailed them below cost price, but the Railway freight was almost prohibitory in bringing the cost to a fair level. Facilities in cheap transit must naturally result in settling the price of fodder. The Railway rates are not liberal to consignors, and I would recommend that the State should arrange to have a very low rate of tariff fixed for hay for famine purposes, to be made use of whenever circumstances necessitate their use. In this connection I communicated with the Railway authorities, and Mr. Shuttleworth also addressed them to reduce the fare, which they adopted with some modifications. In spite of this reduction, the import of pressed hay or kurbi was prohibitory for long distances, and if it is not practicable for the Railway Companies to reduce still further their fares, I am respectfully of opinion that Government should advertise for a liberal prize to be given to an inventor of an improved hay-press and kurbi-pressing machines, so as to allow of the bundles being packed as close as possible in a bale, by which a maximum quantity could be stowed in a railway truck in a minimum of space. Unless this improvement takes place, it will be difficult to carry fodder with any degree of success from forests into the outlying districts of the Deccan which are periodically affected by bad seasons.

Provision for supplying cheap fodder in famine districts should be made on a large scale.

State interference necessary in making Railways to reduce their tariffs for fodder.

Encouragement by prizes for improved hay and kurbi-pressing machines.

72. The poor-houses were not actually depôts for vagrants and immigrants, but the Police had orders to collect loafers and wanderers in the streets and road-side to be brought to the poor-houses. We used to admit in our private poor-house such as were fit to be admitted, vagrants or immigrants included, and, after giving a meal to the able-bodied, sent them to the works, and kept the sick and the emaciated as inmates.

73. Twice or thrice a week two of the members of the committee picked out from the inmates such able-bodied ones as were fit to be sent on the relief works. They were examined by the Honorary Physician in charge of the poor-house before being sent. We had obtained powers previously from the Personal Assistant to the Collector authorizing us to send men from our poor-house who were admitted by the Civil officers in charge of the works.

74. The poor-house ration in our private poor-house, opened by the merchants of Broach, was as follows :—

For ordinary adults.

	Ozs.
Rice	10
Tuvar or mung pulse	1½
Flour of jowári	10
Salt	⅛
Oil	¼
Condiments	⅛
Vegetables	3

For workers 4 ozs. extra were allowed per each day.

It was varied in cases of sickness. Instead of dhall, in cases of diarrhœa, we used to give them curry of whey and tuver, and mung pulses were alternately used. For the hospital patients the ration was as under :—

Sago 4 ozs. and arrowroot 1 oz., and Mellin's food 4 ozs., with milk 8 ozs., for each of the three meals—two morning and one evening.

Emaciated children were given 4 ozs. of milk per each meal and an extra arrowroot $\frac{1}{2}$ ozs. in the afternoon. The above scale of diet in our poor-house was not rigidly adhered to. If we found that any man required a larger quantity, he was given without restriction, but the average scale was as shown above.

78. In the beginning we had employed Hindu Brahmin cooks, but as they were found to be very expensive, we employed Mahomedans. In the beginning some reluctance was shown by all the inmates to eat the food cooked by any but the Brahmin cooks. Some Mahomedan inmates declined to partake of the food cooked by the Hindus. But the reluctance after sometime disappeared, and we gradually employed our own inmates to cook, fetch water, grind the corn and other duties appertaining to a kitchen, and it answered very well, both in point of economy and the selection and change of diet.

In the beginning it is necessary to employ Hindu cooks, as the scruple sometimes drifts away many persons who are in need of a poor-house shelter, but when settled down their scruples disappear.

80. Two cheap grain shops were opened by our Mahajan Charitable Relief Committee. Admission was regulated by issuing tickets to those who were able to earn a poor wage in the city (old and infirm poor residents of the city and poor Mahomedan old widows). The maximum quantity to be allowed was fixed, and committee members were required to inquire whether or not a person was eligible for admission.

This form of relief was successful in so far as it allowed them to make a considerable saving in their purchasing power in a time of acute suffering. We regulated our selling price according to the fluctuations of the market, and allowed a margin of Rs. 6 to 7 per culsee of eight Bengal maunds, computing $1\frac{1}{2}$ to 2 lbs. of grain as the average quantity of food for an adult; a person was benefitted to the extent of 4 to 6 pies per day, and calculating his daily wage to be two annas, he could save about 17 to 25 per cent. of his wage. But, as our funds were not adequate to meet the drain, we had to close one shop, and eventually (after five or six months) the other had to be closed also.

It cost us nearly Rs. 3,800, but we had purchased jowári and rice before the general rise in the prices occurred, anticipating that we would have to pay dearly for our stock of grain later on. Foreseeing the market, and the necessity of opening a

cheap grain shop from previous experience, we had made provision for laying by a cheap stock of grain. Otherwise our loss would have been considerably larger.

81. Cheap grain shops did not discourage the importation of grain, nor did they affect general prices, as their scope and operations are limited, and therefore they have no appreciable effect on the large bulk of trade. They would have a tendency to affect prices if their operations were extensive and if indiscriminable cheap selling was allowed without safeguards. But they are necessary to assure ignorant people that their food-supplies are safe from being pushed to starvation rates, and they work as checks on the tendencies of the mob to loot the shops. Grain merchants fully recognize that they are necessary to prevent their own shops from being looted, and gives them assurance that their operations can be conducted with safety. They allay the fears of the poor that grain could be sold at less than cost prices, proper weights and measures given and the quality of the grain considered, and are checks to lawlessness and grain riots, which are always expected in acute crisis; and wherever they were opened in time grain riots were prevented.

83. Remissions and suspensions of land revenue were solely based on the general capacity of the individual to pay and not in any way to crop-failure. This capacity was determined upon the information principally of the Patels and Mámlatdárs of the district. The orders of Government are to collect assessment from those who are able to pay, and this order was strictly enforced and rigorously carried out.

87. The number of persons on relief was considerably larger than 15 per cent. in the Broach District throughout the entire period of the famine. Sometimes the number was as high as one-third of the population.

The reasons are—

(*a*) Crop-failure was almost total.

(*b*) Fodder-crop also was a failure.

(*c*) The district is purely agricultural, solely dependent on land produce for its livelihood.

(*d*) Cotton, the principal crop and mainstay of the people, did not fetch fair prices on account of heavy American cotton harvest and the rise in the value of silver.

(*e*) Cultivators and farmers were reduced to poverty by three lean years previous to the year of famine.

(*f*) Both the quantity of crop in yield and realization in money value in the previous year was poor.

(*g*) There was a large influx of the immigrants from the adjoining foreign States, such as Rájpipla (Nádod), Káthiáwár (Bhávnagar), Máhuwa (Tálaja) and Dhaboi territory (Gáekwádi).

88. When the scale of wages was reduced in Broach, I think the relief was defective. It was believed that the relief was excessive, because it drew large numbers on the works, and to counteract this tendency the wage was cut down. Workers left the relief works, resulting in much aimless wanderings of beggars in the streets and admissions in poor-houses increased, shewing that the shrinkage in the scale of wages contributed to this result.

90. For the last one hundred years a real famine has not been known in Gujarát, and it would be difficult to say whether the people were more ready to come on relief than before. But the fact of their having come readily in this famine is attributable to their having known that the Sircar had generously saved people in the recent famines in the Deccan and their condition was so exhausted that if they did not seek the help extended they would meet with a certain death. Added to this, the crop-failure was total and credit was almost absent. All these causes and the readiness of Government servants to accept large numbers on relief made the people come on the works readily.

95. The staple food of the district is jowárí, not rice. But jowári was dearer than rice, which were imported in enormous quantities from Burmah, and which formed the principal food-supply of the whole district. Now an adult requires two pounds of jowári to keep him or her in fair health and to satisfy hunger. This can be done by half the quantity of rice, which was not half so nourishing as jowári; so that the people not only on relief works but throughout the district lived on an insufficient and ill-nourishing diet, resulting in a gradual falling off in health until the climax was reached, when the wave of that choleric epidemic swept over the place, killing thousands of people who were already reduced in health and strength by a course of soft and scanty diet. Rangoon rice, called Halwa, had a large admixture of chunam, and diarrhœa was very prevalent where this rice was largely used. This disease, if once set in, was very difficult to be cured, and from my personal experience in the poor-houses this disease claimed a larger number of victims than other diseases.

96. The principal water-supply of the city is the river Nerbudda, which is sweet till March, and some of the wells. In a deficient monsoon cholera always appears of a virulent type; as time elapses the water-supply becomes scanty; the river water is never safe for drinking purposes, as cholera corpses are also buried near to it, and cremation ghaut situated on it, and clothes washed in it. Measures were taken by the orders of Government to clean the wells of the city and the district, and permanganate of potash used to disinfect them. But a reluctance on the part of the people to use the water thus disinfected made the subordinate servants of Government not so inclined to use the disinfecting ingredients freely. We used to disinfect the well from which we drew our water-supply once a week, and further put the ingredient into our water

vessels, and this precaution answered very well. Our poor-house escaped cholera when it was raging virulently in other parts of the city and the district.

97 (*b*). Special sanitary precautions were kept in our private poor-house as under :—

(1) All the new-comers were kept for 24 hours in a separate shed, called "the observation ward," and were admitted into the poor-house proper if found free of all epidemic diseases after that period.

(2) Drinking water was drawn from a reliable well, which was disinfected once a week with potas permanganees, and water was boiled and doled out, for which a gang of women were employed. The water jars were not allowed to be touched by the inmates.

(3) Food, before being cooked, was examined by two members of the committee.

(4) Inmates were not allowed to loaf about in the town for fear of contracting cholera and other diseases.

(5) Separate sheds were maintained for cholera, small-pox and other patients and their clothes burnt.

(6) Invalids were given hot baths, and healthy cold baths twice a week or oftener, if required.

(7) Every day, before morning and evening meals, a prophylactic medicine, dose of 10 minims of sulphuric acid with one ounce of peppermint water, given without any exception.

(8) Latrines were erected at a distance on the leeward of the poor-house and were scrupulously cleaned by bhangies on permanent employ.

100. I observed much immigration from the Native States. It is difficult to state accurately the proportion of such immigrants, but we had a large number of them in our poor-house. A list was prepared, and it was found that out of a total number of 325 as average, we found that 80 belonged to the frontier Rájpipla-Nádod State, and about 33 to 40 to the Baroda territory. As our space was limited and our funds did not allow to keep them permanently, we had caused them to be sent to their respective territories after some time, but they would return. A large number of Bhávnagar and Káthiáwár Coast population came by country boats and was a great nest and loafed about as beggars in the city. The Bhils and Colis, who came from the Nádod forests and frontiers, were reduced to the last stages of starvation, and their condition was pitiable. We kept them and fed them, and only drafted them to their villages after they picked up some flesh.

101. The mortality amongst the immigrants was exceedingly heavy. I have not got figures to show what was the proportion of that mortality compared to the general mortality. But, from the statistics of our poor-house, I am able to say that nearly half of our deaths were put down to the Nádod, Baroda

and Káthiáwár immigrants. I also noticed a large number of these wandering in the streets as beggars, who would not come to the poor-houses nor would they go to the relief works, and in the city during the months of March, April and May 203 deaths occurred (population, according to the last census, being 40,000) as under :—

From 2nd March to 29th ...	...	675
„ 30th „ 26th April	...	482
„ 27th April to 31st May	...	874 (Out of which 209 were due to cholera).
		2,031

The normal death-rate in the city proper (municipal limit) is about 115 to 120 per month. From this it will be perceived that the city mortality was 5½ times higher than normal during the period of March, April and May, and it kept high throughout the famine period. Foreign State immigrants did add and contribute to this high death-rate.

103. I beg to suggest that the following addition be made to the *objects* of the Charitable Relief Fund in paragraph 527 of the report of the Famine Commission of 1898, *viz.* :—

In object 1 after *a*, *b* and *c*, (*d*) may be added :—

"By an addition of tobacco or opium to such of the inmates of the poor-houses as are infirm or debilitated, or who are addicted to its use and who would suffer if deprived of it."

My reasons for the suggestion are—

That, in my visits to the Government poor-houses in the district and in the management of the private poor-house, I came across cases to whom opium and tobacco were as indispensable necessaries as food or clothing, with which opinion the Civil Surgeon of the one and the Honorary Physician of the other completely agreed. Now this grant is inadmissible under the Code. It is believed that both tobacco and opium are luxuries, and if allowed in an institution subsisting on the generosity of the public charity or of the State, it would make them more attractive. I beg to answer this objection by submitting that amongst the poorest classes cheap coarse tobacco and opium for the aged and infirm are real boons, and their deprivation a real source of danger to their health. For the sake of these, inmates would fly the shelter of the poor-houses to wander in the streets to beg to indulge in this craving ; and want of food and exposure made them so ill that they were brought back in a moribund condition, or found corpses in the streets. No amount of kindness or good food was enough to make them stay if tobacco or opium was not allowed. The Civil Surgeon requested me to arrange from private charity to send a regular supply of the drugs, and from the time it was administered desertions became rare. From this experience we allowed in our private poor-house the free use of tobacco and opium after the morning and evening meals, and it gave the greatest satisfaction. The cost is

almost insignificant. We used to buy tobacco of the coarse and cheap kinds, and the daily item of the cost for our poor-house as well as for the Government poor-house came to less than a rupee for 300 to 400 people.

When His Excellency the Viceroy visited the Government poor-house at Broach, I respectfully brought to the notice of Mr. Lawrence, the Private Secretary, that the deprivation of such small comforts tended to make the poor-houses extremely unpopular, that it tended to increase aimless wandering and to an increased mortality. He was pleased to endorse that view and to bring the matter before the notice of the authorities.

The charitable funds are excellently managed as prescribed by the Code in paragraph 527 of the Report of the Famine Commission, but in my opinion by far the largest amount of the charitable money is spent in object IV, sub-section (*a*), *i.e.*, in setting up cultivators afresh in life. Nearly 60 to 70 per cent. of the money is spent on this head. There is no nobler object in charity than the setting up of broken agriculturists, but the money for that object should be defrayed by the State, because the greatest advantage is derived by the State in the rayats being enabled to sow their fields, not only to maintain themselves, but to be able to pay land taxes. Government are largely and vitally interested financially in setting them up as the largest proprietors of land, and as such should bear a fair share of the cost and should not throw it entirely on the funds subscribed by the charitable public for relieving distress in general. Government advance money for seed and plough cattle to those agriculturists who produce securities for the repayment of the loans, and those who cannot are granted money from charity, but the benefit of the latter accrues to the State, and therefore the State should bear a fair proportion of this charge in order that the other objects of charity may get a legitimate and fair proportion of the benefit of the charitable funds.

104. No complaint was heard regarding the incapacity of the railways to keep pace with the increased traffic so far as *food-grains* were concerned. Transit was quick and thorough all over. But it signally failed in its carrying capacity of *fodder*. It was a common complaint that when grass was plentiful on certain stations, other affected tracts were eagerly waiting for their consignments for days and months, and the poor cattle had had a very hard time of it. Broach is connected with Thána and other places, where the crop of grass was good, by water communications, and received hundreds of consignments by the sea-route, and yet, for the failure of the Railway agency, fodder prices went up to fancy prices, and at one time they rose to as high as Rs. 25 per 1,000 lbs. The Railways gave priority to the booking of food consignments over the fodder traffic, because the former paid much better than the latter. Had the Railways been able to cope better with the increased fodder traffic, some

saving would have been made in the lines of the cattle of the distressed districts.

107. The system of paying wages in grain does not prevail in this district, but in certain tálukas a small cash wage is paid, supplemented with grain for field labour, but the tendency is everywhere to substitute a cash for a grain wage. During the famine cash wages did not rise in sympathy with the rise in prices; on the contrary it fell; field labour was stopped, artizans and craftsmen were thrown out of work, mill-hands and mechanics had no occupation, and works of construction, such as houses, buildings, &c., were stopped. This had an adverse effect on the scale of wages. For an ordinary fair season the scale of wages in the city is as under:—

Male (unskilled)...	... 4 annas.
,, (skilled) ...	... 6 to 10 annas.
Female (unskilled)	... 3 annas.
Children, from 12 to 15...	1½ anna.

In this famine workmen could be had in thousands at half the wages quoted above. They offered to work from 8 A.M. to 6 P.M. for food alone, without any cash wage.

110. I have partly answered this question in my answer to Question 12, but I should like to add to it a little:—

Non-official agency was made use of especially in charitable objects, such as the opening of private poor-houses and orphanages, in the distribution of money or grain doles, or clothes, and in the asking of private gentlemen to be nominated to the local charitable committees. In my opinion this agency worked remarkably well and were great aids to the gigantic operations undertaken by the State, and without which much real distress would have gone unrelieved. There is, however, ample scope for an extension of such agency, and Government can advantageously employ it in other channels than in the purely charitable ones. In all Government poor-houses the work of purchasing rations, food and materials for hutting should be left to this private agency, and the contract system of employing a modi or Bania should be done away with. He always palms off inferior rations by leagueing with the Superintendent and the cooks, but where inspection by superior officers is more frequent or vigilant (which is rare), there is always a road open for fraudulent practices, such as in giving *short* rations. The same is the case with kitchens. Private gentlemen in committees, if entrusted with this work, will come forward to undertake it, resulting in a considerable saving to the State and improving, at the same time, the health of the inmates. Besides the Civil Surgeon or other Government paid medical agencies, other private medical gentlemen should be appointed as honorary visitors to the poor-houses, kitchens, relief camps and hospitals to report and suggest any improvement to the Civil officer or to the head of the district. But the

greatest value of this agency will lie in its being asked to supervise payments of tagávi loans and advances. It is an open secret that the subordinate Talátis and other servants of Government have absorbed a considerable portion of this money. Payments should be made in the presence of the Panch, comprised of independent private men of known respectability and probity, who should also have the power of inquiring into the eligibility of a recipient. Often times an ill-deserving man gets a grant by leagueing with the Taláti. The Mámlatdár of the district has too much to do in these times to personally check such irregularities, and, in fact, all Government servants are worked at high pressure and have no time to exercise those checks which they could have exercised if they had more leisure. For this, in every branch of payment and purchase, the private unpaid agency can be employed with advantage. In the purchase of grass for Government Depôts for buying bullocks, in the management of the cattle camps and in every branch, except engineering or expert knowledge, this agency will be of considerable help to Government. In the relief camps also some of the members can be sent to inquire about corruption, which is largely practised, but very rarely brought to light and punished. A poor workman will not disclose the oppression practised on him by his Mukádam, who will always conspire with his immediate head to filch a copper from a timid or weak workman for fear of being turned out or given a penal wage. He will unbosom himself before a private man on the strength of his support and influence. In the supervision of grass depôts in selling grass, this agency will be found to be of great advantage. Not only in the city independent men can be asked to do these things, but poor but honest village men will be found in many tálukas also to work in furtherance of these objects. They should be accorded good treatment at the hands of all Government officers, and any indignity shown towards them should be visited with displeasure by the head of the district, because their feelings are likely to be hurt if they are needlessly interfered with.

112. My experience has shown that the massing of people on large works tends to disorganize family life, to weaken social restraints and also to relax moral ties. Homes and family circles are broken up, and the breaking as under of these ties by death and desertion is a sad picture to depict. People do not mind the grief caused by death in their homes so much as a death far away from it, uncared for in a large camp without any religious rites, however simple, being performed. Deaths which occur in such large numbers blunt their moral susceptibility, and cases are not rare on the relief works of parents deserting their children, husbands, their wives, and all human ties and blood-relationships are for a time completely forgotten, except the one paramount greed of getting a wage to satisfy the pangs of hunger. If workmen could

get occupation near about their villages such social ties would be preserved, and those brutalizing, inhumane and degrading scenes would be less common. I have given reasons in my answer to Question 95 as to the desirability of opening small village relief works in preference to large works, and that arrangement is likely to mitigate this evil to some extent. In the Broach District, amongst the large relief works, two were the largest giving employment to thousands of workmen—A'sa Tank was the first work on which some 8 to 10 thousand people were collected, and on the Mataria Tank about 15 to 20 thousand souls were massed. I do not see the practical utility of both these works. They have cost some lákhs of rupees, but it is a question whether they will give any protection to the district against future famines. Both works in a future deficient monsoon will dry up just when the water is badly wanted. In a normal monsoon they would not be of much use. Instead of these, if small works were taken in hand and people made to work in their own villages, improving their fields, in sinking or constructing one or two big wells, excavating a new reservoir or deepening an existing one, these would be of real assistance to the people and ultimately improve their property and raise the value of Government assets. Supervision for such works can be left to the people themselves by paying them strictly on results, which they would not feel, as they would be interested in making improvements on their own property. The cost of hutting would be saved; the expense of supervision of high-paid servants can be saved by appointing committees and sub-committees, comprising of the Mámlatdár, the Aval Kárkun, Patels, Mukádams and some influential rayats. This principle, if once accepted, can be elaborated by the local officers and made workable. Checks and counter-checks can be introduced and a few officers on circuit can control these committees. In village relief works payments by results should be enforced, as people would not feel the hardship of a stringent test. They could take care of their cattle and keep their huts in order. By massing people on large works at a distance the poor men, when they return in the rains, find that their fragile huts and cottages have been destroyed, and they find it difficult to reconstruct them. In small village relief works, tagávi seed and bullock advances can be made to better advantage and not haphazard as is done in táluka towns or cities. Supervising officers can check and see for themselves that a man has or has not seed or bullock given him, can correct irregularities and distinguish between deserving and undeserving persons for relief. The Patels and local sávkárs can pick out those that have the means to pay for themselves. In my opinion, to put this principle into practice at a short notice, Government should appoint committees for each particular district of the Presidency, on which a fair proportion of non-official agency should be represented. They should prepare a scheme for a future famine relief for submission to Government,

and after careful revisions and corrections a definite scheme should be settled, so that, as soon as famine is declared, those works in the order of their urgency or requirements of a particular táluka can be taken in hand without waste of time. These lists should be revised every year with the march of times and change of circumstances, and should always form part of Government work as are Administration Reports, Budgets of Local Boards, &c.

MR. FARDUNJI TARAPURWALA, C.I.E., EXECUTIVE ENGINEER, AHMEDABAD.

The President.—When did you join the Ahmedabad district?

A.—On the 15th November 1899. I had charge of one district embracing eight *talukas*:—Daskroi, Dholka, Dhanduka, Viramgaum, Prantij, Morasa, Sanand and Gogo.

Q.—What are the areas of these districts?

A.—Daskroi 348 square miles; Dholka 665; Dhanduka 1,098; Viramgaum 677; Prantij 287; Morasa 162; Sanand, 360; and Gogo, 224: a total of 3,821 square miles.

Q.—Where did you come from before you joined the district?

A.—I was acting Superintending Engineer, Northern Division.

Q.—When you joined were test-works in operation, or had relief works under the Public Works Department commenced?

A.—Relief works had commenced in a few *talukas:* three in Viramgaum, two in Dhanduka, one in Prantij and two in Daskroi—eight works.

Q.—What system of payment did you find in operation?

A.—The piece-work system on all works with permission to earn up to 25 per cent. over the Code maximum.

Q.—Were the tasks in accordance with the Code?

A.—They were a little heavier than the Code.

Q.—How long did that system last?

A.—For about a month after I joined; it was altered to the Bombay Code task system, which was gradually introduced on each work and completely in February.

Q.—In what *talukas* was the system changed first?

A.—Daskroi.

Q.—Was that more distressed than the rest?

A.—All the *talukas* were about equally distressed, except that Dhanduka was least affected.

Q.—Why had you not works opened in Dholka, Morasa, Sanand and Gogo?

A.—In Sanand and Dholka there is a kind of root which was dug out in very large quantities and provided food to the people for a long time, and in Gogo and Morasa I believe the Department had some small works going on at the time and the Prantij work practically served Morasa partly.

Q.—With your works on the piece-work system did you find that the labourers were able to earn as much as would give them the Code minimum?

A.—The majority of them were getting more than the minimum. In my statement I have for November 9,000 workers out of 19,000 earning the maximum or more than the maximum, and the remainder were earning above the penal minimum and below the maximum, or on an average 60 per cent. of the maximum.

Q.—Did you satisfy yourself of the correctness of those figures?

A.—Yes.

Q.—Did you notice any people on the works in an emaciated condition?

A.—Some dependants and children were in rather a weak condition.

Q.—In December the proportion of people shown as earning above the Code minimum increased. Was it that they increased in capacity for doing work?

A.—It was not that. It was on account of the introduction of Code task work, and the tasks were lighter than on the piece-work.

Q.—Why did you do that, if a substantial number had been earning above the Code minimum and the people were in fairly good condition?

A.—By Government orders.

Q.—By your recommendation?

A.—Partly by my recommendation also.

Q.—Why did you recommend it?

A.—Because the piece-work system was found difficult to work and dependants were getting weak.

Q.—What were the definite factors which led you to recommend the change, and why did you not introduce the intermediate system with kitchens for the children and dependants?

A.—The Collector started kitchens also. My own opinion is that on the piece-work system, when our numbers increased by leaps and bounds, the stronger people earned more, and the weaker people did not earn sufficient.

Q.—That is a mere matter of the arrangement of the gangs?

A.—There was a general order from Government also to introduce the task system.

Q.—Yes, I am only looking at the workings of the system, because we have been told elsewhere that the piece-work system, if worked with provision for dependants and children, is a much better system, so far as discipline is concerned, than the Code task system, although there are arguments in favour of the Code task system when you have very actual famine and the people have run down.

A.—The intermediate system as given in the Famine Commission's report of 1898 I consider to be a more complex system than the task work system. According to the former system daily measurements and daily payments are required, also the keeping of muster-rolls. There is thus no difference between the two systems, except that in the task work system we fine and in the intermediate we pay by results.

Q.—No, indeed, there is an extraordinarily great difference, the difference of the minimum wage, which makes the whole difference?

A.—But in our district the people were determined to work, and I did not see any special reason for having the piece-work system in preference to the task work system. The task work system I found to work like clockwork and there was less chance of fraud on the part of subordinates and so on.

Q.—Daily measurements and payments and muster-rolls you consider essential to the intermediate system. You did not consider them desirable?

A.—It was not desirable in that we should require larger establishments.

Q.—That is another question, but do you say that daily payments are not desirable in themselves?

A.—I am not in favour of them, partly on account of insufficient establishment, and partly because, in my opinion, daily measurements and payments would lead to greater abuses than weekly measurements and payments.

Q.—What are the greater abuses?

A.—There would be such a large number of these muster-rolls to be looked into that it would be difficult for the Officer in Charge, even if he had two or three assistants under him, to go over them day by day.

Q.—If these difficulties can be overcome would you prefer weekly payments to daily?

A.—I should then certainly prefer daily payment.

Q.—Then is your objection on the ground of establishment alone?

A.—Yes.

Q.—When you introduced your Code task system completely in February you had a considerable increase on your works. How many works had you open at the end of February?

A.—Thirty-one works. Seven in Sanand; two in Dholka, three in Viramgaum; two in Dhanduka; two in Gogo; four in Prantij; three in Morasa; and eight at Daskroi.

Q.—The Daskroi *taluka* had a work for every 40 square miles; the Dholka *taluka* one per 300 square miles; Dhanduka one per 500; Viramgaum one per 200; Prantij one per 70; Morasa one per 50; Sanand one per 50; and Gogo one for about a hundred. May I infer that the distress was greatest in Daskroi, Prantij, Morasa and Sanand?

A.—Not in Sanand.

Q.—You had seven works there?

A.—They were not separate works, but groups of works, the central works were really not more than one or two.

Q.—Was it the same in Daskroi?

A.—Yes.

Q.—What establishment had you in February to manage all these works?

A.—Two Assistant Engineers, three Sub-Engineers, three Supervisors, five Overseers, ten Sub-Overseers, all permanent establishment; and three Supervisors one Overseer and 25 Sub-Overseers, temporary establishment.

Q.—What was the pay of the temporary Sub-Overseer?

A.—From Rs. 40 to Rs. 75. He was a man acquainted with surveying, and the men selected had done previous work in the Public Works Department or Railway Department. We got them by advertising and by inquiries.

Q.—And the temporary Supervisors?

A.—They were very superior men.

Q.—And the five Overseers?

A.—They were also good men, generally speaking.

Q.—Then you had 52 subordinates. Did your staff increase as the year went on?

A.—It increased up to 56 in April.

Q.—How were your gangs constituted and what was the task they had to perform? Did you endeavour to put all the people of the same village in the same gang?

A.—As far as possible. Suppose we got 200 people on a particular day. These were sent by the Special Civil Officer to our subordinates, who divided them, as far as possible according to families into groups of about forty to fifty, taking care to have a certain percentage of men, women and children.

Q.—Were there any orders on that point?

A.—Only a general order that the number of diggers should be sufficient to dig the whole task of the gang at the Code rate of 120 cubic feet or 90 cubic feet, whatever it might be. We had three sorts of tasks: one for soft soil, the next for hard soil, and the third for very hard soil. For the soft soil our tables were based on the supposition that a man will dig 120 cubic feet.

Q.—Did that task last long?

A.—Oh yes, throughout; it was for sandy loam. Some of the soil was so soft one could dig it with a hoe, without a pick. For the next sort of soil the task was 90 cubic feet and for the third 60.

Q.—You say that as long as the piece-work was in force (up to the end of December in some parts of the district and up to the middle of February in others) the task was a high one. Was it higher than 120, 90 and 60 cubic feet?

A.—It was higher for the carriers, not for the diggers.

Q.—You gave fewer carriers?

A.—Exactly.

Q.—Did you select the carriers under that system on any fixed principle such as Mr. Higham's formula?

A.—As far as possible.

Q.—Did you use Mr. Higham's formula in allocating carriers and diggers during the piece-work system?

A.—They were general instructions, but they could not be strictly followed.

Q.—Why?

A.—Because of the variation in the lead and the proportion of men to women.

Q.—But the variation of lead is provided for. Did you follow Mr. Higham's formula in the Code task system?

A.—Yes.

Q.—Does it not then follow that the reason why the piece-work system did not succeed in your case was that you tasked the people too highly?

A.—It was probably so.

Q.—Your reason for proposing the Code task system turns out to be that under the piece-work system you tasked the people too highly. How did you task them under the Code task system?

A.—We had a table prepared of the tasks of the diggers and a separate one for the carriers and a third table combined these two—combined digging and carrying—and this we worked under.

Q.—Proceeding on the third table you have a task of 120 cubic feet for the digger, and you proceeded on the basis that he would have not only to dig it but to carry it?

A.—No, the third table is based on the supposition that he has to do a particular work which is the combination of digging and carrying. He will not have to dig and carry 120 cubic feet, but much less than that. If he has to carry in addition to digging you must reduce the number of cubic feet, and this was reduced. It varied according to the lead. If the lead is 50 feet the task is 71 cubic feet.

Q.—He must dig 71 feet and carry it 50 feet?

A.—Yes, that is for soft soil: for hard soil it was 47.

Q.—What would be the deduced task of a woman?

A.—47 cubic feet.

Q.—As a matter of fact women do not dig, they carry. Did you take two carriers or three? You want to get the wages which a certain person gets. You assess the wages of a man on 71 cubic feet. You get the wages of the women assessed on 47 cubic feet. What were the wages which you gave the man for 71 cubic feet?

A.—The man got $2\frac{1}{2}$ annas, and woman $1\frac{3}{4}$ annas.

Q.—Therefore a group of three would do a task represented by 165 cubic feet and get 6 annas for it?

A.—Yes.

Q.—That is the explanation of Mr. Ali Akbar's statement the other day. Tell me how you made your gangs?

A.—Our gang was formed of a certain proportion of men, women and children according to the numbers we got.

Q.—You stated you endeavoured to group the people from the same village. Now was that the basis of your grouping or was it the digger's task?

A.—Both.

Q.—How could you have both? They are incompatible. Your group is to be fifty. What would you do for instance if you got six men, 40 women and 4 children from the same village?

A.—It would be an extraordinary case.

Q.—I do not know that it would, and if, with your system, you have a much larger proportion of women than men, you will have to throw on the woman the duty the man has to perform, with the danger of making the woman do more than she ought to do.

A.—In practice that danger was never experienced.

Q.—But it must if you say you formed the gangs according to villages.

A.—That was as far as possible.

Q.—Is it that you took the men from other groups if you found the men of one group insufficient?

A.—We did do that.

Q.—Then why did you not tell me you proceeded on Mr. Higham's principles? If you do not proceed on those principles you are in danger of overtasking your people. That is my point. If you arranged according to the villages, have you always taken care that there shall be for each male digger the proportion of women, so that the women did no more than 47 cubic feet?

A.—We did that as far as possible.

Q.—What would you do in the case I gave you?

A.—I would take more men from some other village and transfer some of the women to some other gang. I would arrange it in the proportion of nearly one man to $1\frac{1}{2}$ woman and half a child.

Q.—How did this work in actual practice?

A.—The proportion we generally got was 20 men, 30 women and 10 children; and we had sometimes to separate the people of the same village.

Q.—Then you managed it by rule of thumb and you did not apply Mr. Higham's rule?

A.—Not strictly.

Q.—Say we want to employ 500 people. We have a lift of five feet and a lead of 50 feet. By our formula we arrived at the number of carriers necessary by counting the number of diggers and carriers. After working it out we find a surplus which we employ on some other work and make up a deficit from other groups. You did not do it like that so much as by rule of thumb?

A.—By rule of thumb in a general way.

Q.—Say we have 6 men, 30 women and 14 children. In order to make up the proportion of 20 to 40 you brought in 14 people from outside and got a group of 64. How did you allot the task of 64 people?

A.—If the lead is 50 feet the combined task for a man is 71 feet for soft soil. I multiply 20 by 71, 30 by 47 and 14 by 24, which gives 3,166 cubic feet.

Q.—It was practically this. You knew that a man would dig 120 feet, and practice showed you that it required a certain number of carriers to carry that, and without going into any elaborate calculations you knew that to carry it 50 feet you required two carriers?

A.—Yes. In this particular instance we have a few more carriers than would be required for the diggers, so some of the carriers will do digger's work—strong women and grown up boys digging, but not carrying.

Q.—But the carrying has to be done too?

A.—By those who are left.

Q.—But you are going on a fixed basis of two carriers to one digger. If you have 20 diggers of a gang of 60, they will have to do 2,400 cubic feet. That will have to be carried away by 40 carriers. The point is this, that on your own statement you start with the assumption that the 20 diggers will dig 2,400 cubic feet. But there are 670 cubic feet to be dug by the women or children?

A.—In this particular case the number of carriers is more than that required under the table.

Q.—There was a very great fall in the numbers on Government works in May. Was that due to cholera?

A.—Yes. The people disappeared from some of the large works.

Q.—Where did they go to?

A.—To different places; to new works also, sometimes.

Q.—You had a fall of 45,000 people. Were you able to employ them on village works?

A.—We had no scheme of village works.

Q.—I notice under the Code task system the great majority of workers were earning above the minimum. Apparently you had no recusancy. People had no objection to doing a full day's work. Were all the people who came on your works from the beginning really in need of relief?

A.—Yes. Perhaps a small percentage could have got on without relief.

Q.—Did you have people on your works, who had exhausted all their resources except perhaps their cattle, which they did not want to sell, otherwise they would be quite stranded when agricultural operations began with the rains, and did not want to borrow money, because they could only do it at extraordinarily high rates of interest?

A.—In the latter part of the famine we had some.

Q.—Throughout the famine was there a small or large percentage of people on works who might have carried on for a month or so without coming? Did you find when they came that they did a full day's labour?

A.—In the beginning they did half the task.

Q.—Did you make special gangs for them?

A.—No, our practice was not to fine the first fortnight.

Q.—Did you fine strictly after then?

A.—Yes.

Q.—If a man did 95 per cent. of the task did you fine him?

A.—According to my first scale of fining I did not. But subsequently I fined strictly; after the Government resolution.

Q.—When did that resolution come?

A.—About March.

Q.—You were ordered to fine strictly. Then did it ever happen that the resolution was so strictly interpreted by your subordinates that people who did 98 per cent. of the task were fined?

A.—It was represented to me by my subordinates that it would not be fair on those people and I in turn represented the matter to higher authority.

Q.—In the interval between your representation and getting orders were people who did 98 per cent. actually fined.

A.—Yes.

Q.—How many were thus fined?

A.—A very small percentage; those who did between 100 and 75 per cent. of the task were fined half the difference between the minimum and maximum wage.

Q.—So that one who did 78 per cent. and one who did 98 per cent. would be equally fined?

A.—Yes.

Q.—How long did that state of things continue?

A.—Till about June or July, when a margin of 12½ per cent. was allowed.

Mr. Bourdillon.—When did you begin to carry out the resolution on your works?

A.—It took a week or so to operate.

The President.—What was the effect of the orders? Was there any dissatisfaction?

A.—Not much, because most were doing full tasks.

Q.—But that is not so, because you got the orders in March, and in April 88 per cent. are shown as having done the full task. Am I to understand there was no fining in that month?

A.—Out of 124,000, 109,000 got full wages and the remainder were fined of course.

Q.—Does it follow that the remainder were fined?

A.—Oh, yes.

Q.—Had this order in March the effect of making the people work hard, or had it any effect the other way?

A.—It had no effect one way or the other.

Q.—But I find a greater percentage earning the full wage after the order than before; 85 in June and 92 in July.

A.—That was because the days were longer then and they could work longer hours.

Q.—But had the order an injurious effect upon your workers?

A.—Not in this district.

Q.—Was that because you interpreted the order liberally?

A.—No, on account of the care of my subordinates in getting the full task out of the people; if they did a little short one day they made them make up for it the next day.

Q.—Had you any distance test?

A.—Only rarely. We drafted people on the work from the neighbouring villages to a more distant work.

Q.—Did you find any difficulty in drafting them?

A.—They would not go sometimes.

Mr. Bourdillon.—Did you collect any statistics of the immigrants on your works?

A.—Yes, a few.

Q.—Are they reliable?

A.—Not at all.

[*The witness subsequently submitted the following memorandum:*—]

A considerable part of my evidence relates to the method of tasking adopted in the Ahmedabad district. The President wanted to ascertain whether the number of carriers in a gang was apportioned to the number of diggers, strictly in accordance with Mr. Higham's formula, and what I wished to explain was that, though the relative number of diggers and carriers was not fixed by any elaborate calculations in every case, still the table we used, and what we actually did, were in general conformity with Mr. Higham's principles. Before, however, I could make the point quite clear, the President decided to postpone further discussion on the question. I therefore consider it desirable to explain the point more fully now.

2. I attach a printed copy of the task-work table adopted in this district. The tasks given in the table are combined digging and carrying tasks for each class, and are calculated strictly in accordance with Mr. Higham's principles, the duty of a woman carrier being assumed as 10,000 and the theoretical working capacity of a man being taken equal to 1½ times that of a woman and 3 times that of a child. The combined tasks given in the table do not at all mean that any person whether man, woman, or child has to do both digging and carrying. The object of the table is merely to afford facility in calculating the quantity of earthwork to be done by the whole gang, it being out of the question to expect a muster *karkun* to be capable of making elaborate calculations.

3. An example is given at the foot of the table showing how the latter is to be used In this case the reduced lead is 400 feet and the gang consists of 15 men, 20 women, and 10 children, whose total combined task according to the table comes to $(15\times26)+(20\times17)+(10\times9)=820$ cubic feet. Now from the instructions the *karkun* at once knows that to dig 820 cubic feet 7 men only would be required; he therefore employs the other 8 men on carrying. Thus the stuff dug by the 7 men ($7\times120=840$ cubic feet), will be carried by 8 men, 20 women and 10 children. Now by Mr. Higham's formula the carrying task of a woman for a lead of 400 feet is 23 cubic feet, therefore, it is 34 cubic feet for a man and 11 cubic feet for a child. Thus the above people will carry as under:—

8 men	×34=	272
20 women	×23=	460
10 children	×11=	110
Total	...	842 cubic feet

which is very nearly what the 7 men will dig.

4. But suppose there is a preponderance of carriers instead of diggers. Suppose a gang to consist of 6 men, 40 women (including boys from 12 to 16) and 4 children and suppose the reduced lead to be 200 feet. By the table the combined task for the gang would be:—

$(6\times41)+(40\times28)+(4\times14)=1,422$ cubic feet which would require 12 diggers whereas there are only 6 men. In this case 9 grown-up boys and strong women selected from the 40 persons of the carrier class would help the diggers, the former in digging and the latter in

filling into baskets (which latter work is included in the diggers' task) and the digging and carrying will be done as under :—

Digging—

6 men	×120=	720
9 boys and strong women	× 80=	720
Total ...		1,440 cubic feet.

Carrying (according to Mr. Higham's formula)—

31 women	×42=	1,302
4 children	×21=	84
Total ...		1,386 cubic feet.

Thus the digging and carrying nearly balance each other.

5. The above two examples show that variations in the proportion of men, women, and children presented no serious difficulty in carrying out Mr. Higham's principles. The combined task of every gang, however constituted, was calculated by the table, and if there was a preponderance of diggers, some of the men were employed as carriers, and if the number of men was deficient some of the grown-up boys and strong women assisted the diggers, the former by digging and the latter by doing the work of filling into baskets. In most cases the gangs did this of their own accord. In extreme cases, however, when the preponderance of men or women was very great and there was no suitable lead on the work (which rarely happened) the gang was re-formed by additions from or drafts to other gangs.

6. The above examples show that by a little tact a woman or child need never be employed on digging and this was actually the case in this district. In my numerous visits to the work I do not remember having ever seen women digging, though they often times assisted the diggers, by filling into baskets. It is only necessary to add that practically there was no lead of 50 feet in this district. The minimum reduced lead was 100 feet and 200 to 300 feet was the most common lead, while on most works we had a variety of leads to suit differently constituted gangs.

TABLE.

Table of Tasks for Digging and Carrying.

Reduced leads in feet.	Ordinary earth.			Hard earth.			Kankar murum.		
	Tasks per day in cubic feet.			Tasks per day in cubic feet.			Task per day in cubic feet.		
	Class I.	Class II.	Class III.	Class I.	Class II.	Class III.	Class I.	Class II.	Class III.
50	71	47	24	59	39	20	44	30	15
100	58	38	19	50	33	17	39	26	13
150	48	32	16	43	28	14	34	23	11
200	41	28	14	37	25	12	31	20	10
300	33	22	11	30	20	10	26	17	9
400	26	17	9	24	16	8	21	14	7
500	22	15	7	21	14	7	19	12	6
600	20	13	7	19	13	6	17	11	6
700	18	12	6	17	11	6	16	10	5
800	16	10	5	15	10	5	14	9	5
900	13	9	4	13	8	4	12	8	4
1,000	13	9	4	13	8	4	12	8	4
1,200	12	8	4	12	8	4	11	7	3
1,400	10	7	4	10	7	3	9	6	3
1,600	10	6	3	9	6	3	8	6	3

NOTE.—Reduced lead is equal to the horizontal lead + 12 times the vertical lift.

The tasks are applicable to reduced leads half way above and below the figures given. Thus, the figures opposite 150 feet apply to all values of the reduced lead between 125 and 175 feet and those opposite 800 feet for all values between 750 and 850 feet.

EXAMPLE:—To find the task for ordinary earth, for a gang of 15 men, 20 women, and 10 children, carrying stuff, a horizontal distance of 300 feet with a total lift of 8 feet.

Reduced lead = 300 + 12 × 8= 396 feet.

The task for 400 feet applies, and is 15 men × 26 = 390 cubic feet.

20 Carriers × 17 = 340 cubic feet.

10 Children × 9 = 90 ditto.

Total task of gang 820 ditto.

A digger's task is to be taken at 120 cubic feet for ordinary earth ; 90 cubic feet for hard earth ; and 60 cubic feet for kankar murum ; and the above gang task of 820 cubic feet will require 7 men to do the excavation and the remaining 8 will have to act as carriers. The muster clerk will arrange accordingly. It is to be clearly understood that the tasks arrived at from the table, *include both the excavation and the conveyance* of the amount arrived at by multiplying the numbers of diggers, carriers, and children by their respective tasks.

Mr. Furdunji C. Tarapurvala.

Answers by Mr. Fardanji C. Tarapurvala, Executive Engineer, Ahmedabad District, to the questions drawn up by the Famine Commission.

3*a*. The average rainfall of the Ahmedabad District during the rainy season for the 20 years previous to the famine comes to 30·61 inches.

3*b*. The average actual rainfall in the rainy season of 1899 in different tálukas was 5·44 inches. It represented nearly 18 per cent of the average rainfall.

3*c*. Except for a few drops of rain at some places in December, the rain ceased over the whole district by the 11th of October.

3*d*. About three-fourths of the whole rainfall fell in the month of June and the remainder was distributed over the subsequent months, in very light showers. Ordinarily July, August and September are the rainy months.

9*a*. A programme of relief works was maintained from year to year as required by standing orders; but owing to the very long immunity from famine enjoyed by the district, and the facilities that exist in the district for providing at short notice additional works suitable for famine relief, in the shape of tank excavation, the programme was hardly intended for meeting an acute famine like that of 1899, and had to be very largely supplemented during the progress of the famine. A few works in the programme had been located, surveyed and estimated for, but the majority of the works were simply mooted, and were surveyed and estimated for as required during the famine.

9*b*. No scales of establishment were included in the programme, and no lists of candidates qualified for famine service were kept up.

10. The relief programme contemplated large public works as the backbone of the relief system. Small village works were included in the programme as auxiliaries to the large works, but they were neither located nor estimated for from the beginning.

14. Irrigation wells can be made in most parts of the district. The depth of water below surface varied from 12 ft. to 40 ft.

19. When it had been decided to open regular relief works, large public works were first opened.

20. The works were under the control of the Public Works Department. No scale of supervising establishment was prescribed in advance, but the establishment for immediate requirements was ready on the spot, and was distributed on the several

works, from time to time, according to convenience and the importance of each work. The supervising establishment was increased later on as the number of works increased. There was no delay in opening the works. Tools and Plant were available in sufficient number at all times.

21. Long works, such as drainage or irrigation channel and railway embankment, were divided into charges, each charge providing for a maximum of 5,000 workers. Concentrated works, such as tank excavation works, were not divided into charges. Only a few of these latter employed over 5,000 workers, the maximum in their case being fixed at 10,000. These works formed a single charge each, but were divided into two or more sub-charges, with a sub-overseer or a maistry in charge of each, under the general control of the officer in charge. The above maxima were exceeded on a few occasions only, when immediate steps were taken to relieve the pressure by drafting some of the workers to other old works, or by opening new works, as the circumstances required.

22. Each charge had its own establishment The latter varied for different works, but as a rule it consisted of the following :—

(1). The Public Works Department officer in charge, who was either an Assistant Engineer, a permanent or temporary upper subordinate, or a permanent lower subordinate.

(2). One or two office kárkuns according to the importance of the charge, pay Rs. 12 to 30.

(3). A maistry or sub-overseer for about every 2,000 workers and one more for general duty, such as looking after hutting, sanitation, &c., salary Rs. 30 to 75.

(4). Check kárkuns at the rate of 1 per about 1,000 workers on Rs. 15 to 22.

(5). A store kárkun with an assistant kárkun if needed, salary from Rs. 15 to 20.

(6). Muster kárkuns at the rate of 1 per every 150 to 200 workers. Salary from Rs. 10 to 15.

(7). A cashier for every 1,500 to 2,000 workers, on Rs. 40 to 50 per month.

(8). One or two peons on Rs. 8 to 10 per month.

Note.—The officer in charge had in many cases two or more charges under him.

The arrangements prescribed for hutting or sheltering the people, for conservancy, and for sanitation and water supply were generally those detailed in Appendix IV of the Bombay Famine Code. The arrangements for food supply were generally made by the Civil Department, and for medical conveniences and supervision by the Medical Department.

As a rule, hutting for workers as well as for establishment, and hospital, conservancy and water supply arrangements were completed before a work was started.

23. Admission to the works was free to all persons ready to submit to the labour test. Distance test was not insisted on except in places where two or more works were situated within a reasonable distance from each other, when the people from villages near a work were sent to a more distant work, and even in such cases the distance test was not always enforced unless there were grounds to believe than an appreciable number of people not in actual need of relief were resorting to the work.

Residence on works was not compulsory, but as a matter of fact a large majority of the people resided in the relief camps. It was not practicable to strictly enforce compulsory residence on works.

24. I am of opinion that in a famine like that of 1899, a large work entertaining 10,000 persons may be expected to serve an area of 300 square miles and a population of 75,000. Applicants for relief sometimes went 30 miles and even more from their homes for relief. Going 12 miles was very common.

25. The officers of the Public Works Department were not subordinate to the Civil authorities in the following matters :—

All professional matters including setting out tasks and taking measurements and making payments, sending accounts, providing hutting material, tools &c. In these they received their orders from the Executive Engineer direct. In other matters also they generally received their orders from the Executive Engineer, but in urgent matters they were bound to carry out any orders given by the Collector, the Sub-Divisional Assistant or Deputy Collector or the District Medical Officer.

26. There was a special Civil Officer for each charge. He was generally taken from the karkún and Talati classes ; his salary was from Rs. 30 to 50. He was much inferior in rank to the local representative of the Public Works Department.

The special Civil Officer's duties were as defined in the preamble of Government Resolution (Famine Department) No. 632, dated 3rd February, with the exception of para 7, the duties defined in which were carried out by the Public Works Department. The Civil Officer had no authority as regards the measurements and the calculation of wages. He sometimes supervised payments. His principal duties consisted in receiving applicants for relief, and managing the kitchen. He also reported to the higher Civil Authorities any defects or shortcomings in the general management of the work, on the sanitary state of the camp, and the general condition of people.

27. The decision as to which of the prescribed tasks was applicable in any particular case rested with the Public Works Department Officer.

28. The gangs of labourers were, as far as practicable, so constituted that the number of carriers bore the most suitable proportion to the number of diggers, depending upon the nature of the soil and the lead. Each gang consisted of about 50 persons. Arrangements were made to secure village or family gangs, and no serious difficulty was experienced in doing this.

29. The classification of labourers was the same as that recommended in paragraph 445 of the report of the Famine Commission of 1898, and the wages were the same as those recommended in para. 456 of the report, with the exception that the wage for Class I was 19 chataks instead of 20, and that for working children 10 chataks maximum and 7 chataks minimum instead of 8 chataks.

Experience did not justify any modification either in the classification or in the wages.

30. The classes in which men and women are treated alike and get the same wages are II and IV. According to my experience no distinction should be drawn between men and women in these classes.

31. Piece work system was adopted on the large works at the outset, and was continued for about 3 months, when, owing to the distress becoming acute, task-work system was substituted and carried on till the end of the famine. The two systems were carried on simultaneously for a short period on two or three works during the process of change from one system to the other.

32. My experience leads me to entirely agree with the Famine Commission of 1898, that a system of payment by results was unsuited to the conditions of acute distress or actual famine. I do not think that, even if started in time, relief can be adequately afforded in severe famine by works conducted throughout on a system of payment by results.

33. The task exacted at the outset, when piece work was in force, was that prescribed in the Bombay Code. It was not graduated to the class of workers, *e.g.*, artisans, cultivators, professional labourers, &c., but the full task was demanded from all. No allowance was made for the distance the workers had come. On the introduction of task work system the tasks were made more lenient, being very nearly those ordered in G. R. No. F-538 of 5th March 1900. The altered tasks were applicable to all classes of persons alike, and their introduction was necessitated by the acuteness of the famine, a large number of applicants for relief coming in a reduced condition and being incapable of doing the former tasks. The tasks were again stiffened somewhat near the end of the famine to induce people to go to field work.

34. My experience leads me to believe that the scale of wages was adequate. Its effect was to keep the workers in fairly good condition. There was no evidence to speak of that the workers saved upon their earnings; but I believe a very few thrifty people, specially of the professional class, having

large earning families, and who steadily remained on the works and worked honestly, did save a little after a long stay on works.

Small silver and copper coin did not return freely to the Banias on the works, as people generally preferred purchasing their grain, &c., in the nearest market towns. I have known people to go 10 miles on a Sunday to make their purchases. The reason for people preferring to go to towns were :

(1) They could get anything they wanted in the town, while the Banias on the work sold only a few kinds of grain and other things

(2) The prices in the town were slightly lower than on the works.

35. When piece-work was in force, people were permitted to earn more than the full wage in order to support themselves on the rest day. When task work system was introduced, a rest-day wage was given at the rate of $\frac{1}{6}$th the minimum wage for every day of the week a particular person was present on the work ; I prefer the latter method.

36. My experience leads me to consider that the minimum rates are not too high for persons in Class IV. As regards able-bodied workers I am of opinion that fining should be continued down to the penal wage, although in this District fining down to that extent was practically never found necessary. In adopting the penal wage I would first satisfy myself that the workers were in a condition to do the tasks imposed and that their failure to complete them was due to contumacy, pure and simple. I would weed out all weak people from each gang and form them into separate gangs and give them much lighter tasks till they picked up sufficient strength to enable them to do the ordinary task.

37. At the outset when the piece-work system was in force there was no minimum wage, but generally the people managed to earn a fair wage, in spite of the high task, because the first comers were generally from the professional class and were in better condition than those who came later on. The consequence was that the minimum wage nowhere became the wage generally earned. When the task work system was introduced, there was a minimum wage, but there was little tendency to fine down to it, as people generally managed to do full or nearly full tasks, and a few gangs only earned the minimum wage. Approximately the workers in this District have done 95 per cent. of the task and earned 97 per cent of the full wages.

38. Payment was made weekly except to new arrivals, who were paid an advance of one anna daily for the first week or so. More frequent payments than once a week is neither practicable nor *very* desirable, provided newcomers are, in addition to the daily advance, not subjected to any fine for short work for the first week or 10 days, as was done in this District.

39. When people first came to a work such of them as wanted it were paid an advance of 1 anna daily for the first week or so. I found that this

advance in a great measure prevented the workers being thrown seriously into the debt of the Banias.

40. In piece work system on most works a gang was divided into sub or family-gangs, and the payment was made to the head of the sub-gangs. In task work system, payment was made to the individual. The latter method is certainly preferable to the former.

41. Figures for three typical works are given in statement marked A attached, giving the required information at the time of the greatest pressure, *viz.* the end of April. Penal wage was very exceptional in this District.

42. The piece work system was in force in this District in the beginning of the famine. The system adopted was that described in paragraph 209 of the report of the Famine Commission of 1898, except that measurements of work were taken bi-weekly instead of daily and the rates were so fixed as to make allowance for the cost of dependants and the rest-day wage, as per paragraph 212 of the report.

43. The maximum wage for working children below 12 was 10 chataks. Non-working children were relieved, as a rule, by being fed in the kitchen, the ration for those over 8 being 7 chataks and for those below 8 being 5 chataks. On some scarcity works dry grain was distributed to non-working children instead of cooked food, and sometimes when there was any delay in starting a kitchen, cash payment was made for a few days in the beginning of a work. For children in arms an allowance of 2 pice per day in the beginning and 1 pice later on was given to the mothers.

Weakly persons were relieved in two ways. Those absolutely incapable of work were sent to the poor-house, and those able to do some work were put in class IV (nominally worked) and given some light work to do, such as sweeping the camp, clearing ground, breaking clods, ramming earth-work, erecting huts, &c. They were paid the minimum wage but no definite tasks were imposed, as from the nature of the work any measurements were impracticable. A mukadum was, however, kept to see that the people worked the whole day and did not loiter about. I consider the above method preferable to either task work with a minimum wage or piece-work at favourable rates.

34. No.

45. Kutcha muster rolls were kept up by the subordinates. Owing to the division of workers into gangs no serious difficulty was experienced in promptly introducing the Code task system; all that was wanted was an increase in the number of muster-karkuns, and cashiers. As a very large number of muster karkuns was required, training schools were started on two important works, where selected candidates were admitted and taught the work of keeping musters, setting out tasks, taking measurements and filling in the gang books. A fortnight's training was generally sufficient.

46. Wages were calculated according to the price of staple food grain for the week, certified to by the Mamlatdar. Bajri, jowari, rice or maize, whichever was cheapest, was taken to be the staple food grain. Small variations in prices were neglected.

47. *Opening a relief camp.*—The opening of a particular relief work was decided upon by the Collector in consultation with the Executive Engineer, subject to the approval of the Commissioner. On the receipt of orders to open a relief work, the Executive Engineer issued the necessary orders to his subordinate to proceed to the place at once and make all necessary preliminary arrangements, such as lining out the camp, erection of huts for the establishments of the several Departments as well as for the workers, clearing and disinfecting wells, digging trench latrines, providing the necessary establishment, obtaining the required tools from the Head Office and lining out chowdis in the work. These preliminary arrangements took from one to two weeks to complete according to the size and nature of the work.

Admitting and Classifying labourers.—This duty of admitting the labourers was performed by the Special Civil Officers. On the day of arrival, all applicants, who, in the judgment of the Special Civil Officer, required immediate relief, were relieved by grain dole or cooked food and handed over to the officer in charge, who formed them into suitable gangs and put them on work the next morning.

Providing for dependants —Now-working children under 8 were fed in the kitchen maintained by the Special Civil Officer. Incapable adults were either fed in the kitchen or sent to the nearest poor-house. For children in arms a cash dole of 2 pice, which was later on reduced to 1 pice, was given to their mothers. Milk and Mellin's food was also given to weakly children under the orders of the Hospital Assistant.

Providing Tools and Plant.—These were supplied to the different works from the head office. Most of the tools used in this District were of local manufacture, the prices of English tools having gone up over 100 per cent. There was always a sufficient supply of tools and baskets ready at hand.

Marking out and measuring work.—This was done by muster karkuns and checked by maistries and sub-overseers. Each muster karkun looked after 4 or 5 gangs of 50 each. The names of the labourers were entered in the musters according to classes, and the task to be performed by each gang was calculated immediately after the morning roll-call from the task-work table and entered in the gang book (a specimen page of which, marked B, is attached), along with other information such as, lead, lift, nature of soil, &c. The task was then marked out on the ground so that the people might know how much they were expected to do on the day, and the work actually done was measured just before the evening roll-call and entered in the gang-book. At the end of the week, the figures for the tasks set

and the work done respectively, were totalled up and from these totals the fine, if any, to be imposed was determined by the officer in charge. Muster rolls were then properly completed, and after being signed by the officer in charge were handed over to the cashier for payment.

As a rule the muster rolls were commenced on Thursday and closed on Wednesday. Thursday was taken up in completing them and the payments were made on Friday and Saturday.

Paying Wages.—Payments were made by cashiers in the presence of the Sub-Divisional Officer or a maistry or sub-overseer deputed by him. They were mostly made at the site of the chowdis, to each gang in turn, so as not to disturb the other gangs. The cashiers were supplied with funds by the officer in charge, from time to time, as required. Payment was made to individuals, and any payments remaining unpaid, were marked "Unpaid" there and then. Unpaid wages if not claimed within a week were forfeited to Government.

Imposing Fines.—At first fines for short work were imposed as given in Statement C attached. Afterwards the scale of fine was altered as shown in Statement D, and later on it was again altered as per Government Resolution No. F-581 of 9th March 1900, modified subsequently as per Government Resolution No. 2803 of 12th July 1900. In this District the amount of work done has on the whole been about 95 per cent. of the task set, and the payments made have been about 97 per cent of the total wages earnable, showing that fining has been very slight in this District. On several works every gang did the full task and there was no fine at all.

Conserving the Water-supply.—Water was obtained mostly from existing wells which were first cleared, repaired and disinfected before use. In some places, however, kutcha wells had to be dug. The water was drawn from the well by a mote and collected in a masonry chamber, which was covered in, and from which water was distributed to the people by special boys and women standing within the enclosures surrounding the trough. No person was allowed to dip his pot into the well or the trough. Most of the wells yielded fairly sweet water, except on the Panar drain, where the water was slightly brackish.

Casks were placed on the works at suitable places for providing drinking water to labourers while working.

Hospital requirements.—These were arranged for by the Medical Department, but the staff of ward boys and other menial servants was supplied by the Public Works Department, as also cots, mats, &c. The huts for the hospital and its establishment were also supplied by the Public Works Department.

48. Tasks were stiffened or relaxed under the orders of the Superintending Engineer. The wages were never changed.

58. My experience leads me to the opinion that in a straggling district like Ahmedabad, a few small village works in the outlying parts of the district where a large work would not fill or would be impracticable for want of water, might be opened in conjunction with the large central works with great benefit to the people. One objection to opening large relief works in the outlying parts is that they would unduly attract people from the surrounding Native States, but this objection does dot apply in the case of small village works where none but British subjects from certain villages would be admitted, all applicants from Native States being told to go, if they liked, to one of the central works.

67. Dependants were relieved on large works with cooked food, as a rule; on works of a straggling nature such as a long channel, dependants were in some cases relieved with uncooked food, and on few other works they were relieved in cash till a kitchen could be opened.

95. Yes.

98. I believe the heavy mortality was in some measure due to diseases connected with unsuitable food, especially Burma rice, and adulterated jowári flour.

103. Yes—much in the beginning of the famine, especially in Prántij and Modasa. Roughly, I should say about 10 per cent. of the total persons relieved on the works were immigrants from Native States.

114. I am of opinion that the change in the system of work from piece to task work system and the reduction of task had the effect of increasing the number of persons seeking relief and thereby preventing a great rise in the mortality which would have taken place but for the change which was introduced at a time when the famine had become acute and the task in force was beyond the capacity of the average newcomer. The effect of the distance test was in some cases to reduce the number of workers, but it must have, I believe, added considerably to the sufferings of and the mortality among the persons concerned. I am of opinion that distance test should be very rarely, if ever, applied in such an accute famine as the late one.

There were no changes in the wages in this district and the changes in the mode of calculating fines had no effect upon either the number seeking relief or the mortality, as fining was generally very slight.

115. Not that I know of.

F. C. TARAPURVALA, B.A., L.C.E.,
Executive Engineer, C. D.

Ahmedabad, 12th January 1901.

B 1387—3

A.

Statement showing average daily number of workers earning different wages during the week ending 25th April 1900.

Name of Work.	Total number of Relief Workers earning			Total.	Remarks.
	The full wage.	The penal wage.	A wage between the full and penal wage.		
Extension of Khari Cut ...	13,585	...	1,322	14,907	
Excavating the Gangasar Tank	7,688	...	1,640	9,328	
Excavating the Panar-Dediasan Drainage Channel	5,099	...	43	5,142	
Total ...	26,372	...	3,005	29,377	

B.– (Translation).

Date.
Gang No.
Kárkún's Name.
Mukadum's name.
Kind of earth.
Lead.

	Class.	No.	Work to be done by each.	Total work to be done.
Work to be done . {	1 ...	...	...	...
	2 ...	...	...	...
	3 ...	...	...	...
	Total ...	...	...	...

Measurement of work to be done × × =
Measurement of work done × × =

C.

Scale of fines.

For 100 to 90 per cent. work ... No fine.
„ , 90 to 80 per cent. „ ... 1 pice to man and woman.
„ 80 to 70 per cent. „ ... 2 pice to man.
1 pice to woman.
1 pice to working child.
Under 70 per cent. ... 3 pice to men.
2 pice to women.
2 pice to children.

D.

Table of fines circulated with Executive Engineer Ahmedabad District's No. D-8 of 8th February 1900.

Proportion of work done to work to be done as per Gang Book.	Fine per day in pice.			Remarks.
	Class I.	Class II.	Class III.	
	Grain 16 Lbs. per Rupee.			
Up to $\frac{7}{8}$	2	1	1	
Up to $\frac{3}{4}$	3	2	1	
Up to $\frac{1}{2}$	4	2	1	
Below $\frac{1}{2}$	5	3	2	
	Grain 17 Lbs. per Rupee.			
Up to $\frac{7}{8}$	1	1	1	
Up to $\frac{3}{4}$	2	1	1	
Up to $\frac{1}{2}$	3	1	2	
Below $\frac{1}{2}$	4	2	2	
	Grain 18 Lbs. per Rupee.			
Up to $\frac{7}{8}$	1	1	1	
Up to $\frac{3}{4}$	2	1	1	
Up to $\frac{1}{2}$	3	2	2	
Below $\frac{1}{2}$	4	3	2	

MR. P. J. MEAD, I.C.S., COLLECTOR, AHMEDABAD.

The President.—When did you join the district?

A.—Originally six years ago. On 3rd September 1899 I rejoined as Assistant Collector of Daskroi, Prantij and Morasa.

Q.—Did you make a tour of these *taluqas?*

A.—Yes, up to October 8th I had the Prantij and Daskroi charge and then took the Sanand and Dholka charge which I held up to December 2nd; I then took over Viramgam, Dhanduka, and Gogo.

Q.—Was the pressure at that early stage considerable?

A.—Fairly so.

Q.—Did you notice people wandering about in search of food, or emaciated people on the test-works?

A.—There were many wanderers and there was some tree cutting and petty pilfering, but I saw no emaciation in those early days.

Q.—Did people cut their own trees or other peoples' trees?

A.—Government trees for choice.

Q.—When you came to Malik Saebán tank how many people did you find there?

A.—I came when there were none at all. They came on in considerable numbers before I left, mostly from Jodhpur. The immigration had set in and the tank work was really started in a hurry, because of the crowds of beggars who were hanging round the city gates. That was the first indication of distress round Ahmedabad.

Q.—How many were there on this tank when you left in September?

A.—Another tank had been opened and on the two there were 15,000 or 16,000; about 50 per cent. of which were immigrants

Q.—Had the failure of the *kharif* been great in your three *taluqas?*

A.—With the exception of Gogo—where a certain amount has been secured by well irrigation, and there was a crop of about six annas—the failure was complete.

Q.—But not over the whole area?

A.—We have only four Government villages in Gogo. The others are *talúqdári,* for which I do not speak, but I should say the same efforts were made in these as in the Government villages. It was not every field that could be irrigated from the wells. But the ground is very stony and water can be taken a great distance.

Q.—What measures of relief did you take in your *taluqas?*

A.—Relief works were in operation when I joined. At the end of November there were two in Dhanduka, three in Viramgam, and none in Gogo. They were under the Public Works Department and on the task-work system.

Q.—Did you see the system and establishment on these works?

A.—Yes.

Q.—Were you completely satisfied?

A.—The works were well managed considering the establishment.

Q.—Was the establishment insufficient or incompetent?

A.—I do not think it was incompetent, but it might have been increased with advantage.

Q.—Payments were weekly?

A.—Yes, throughout the year. I heard a few complaints of people who suffered because of the weekly payments.

Q.—If you had sufficient establishment would you be in favour of daily payments?

A.—Most decidedly.

Q.—Were you in favour of converting these works from the piecework system into the Code task system?

A.—I had no previous experience of the task system, so I can hardly say whether I was in favour or not. I saw no imperative reasons for the change.

Q.—Later on you visited these works under the Code task system. Did you then find anything calling for notice? Were people less willing to perform the full task?

A.—No.

Q.—So far as that was concerned the change had little effect?

A.—Yes.

Q.—Did you find the feeling between the Public Works subordinates and the people on the works all you could wish for?

A.—I consider their relations were very good indeed. There was a great deal of sympathy shown by all the Supervisors and Overseers in charge as far as in them lay. They treated the people very well.

Q.—Was the Civil Department responsible for sanitary matters?

A.—In some cases I gave orders that I should hold the Public Works Department officer in charge responsible for the sanitary arrangements; it always depended on the men. The Civil Officers as a class were not good, and I placed things in charge of the Public Works Department Officer, who was always of a superior stamp to the Civil Officer. At first the Civil Officers were men of the *karkun* class, afterwards they were *talatis*—village accountants.

Q.—Was that an improvement?

A.—No.

Q.—I should think it was the other way?

A.—Yes, the change was on account of the pressure for men.

Q.—Could you not got better men on Rs. 100 a month, educated men? If you had paid the money could you have got them?

A.—I think possibly we could.

Q.—Regarding the hospitals, we have been told that in some instances the Hospital Assistants in charge were not very competent?

A.—They varied, some were good and some bad. They were very hard worked.

Q.—What was the accommodation of the hospitals attached to works?

A.—The largest was one serving two works in Viramgam, with accommodation for 200.

Q.—Were the hospitals far from the works?

A.—Not as a rule. In this case it was half a mile. They were on the sites of the works.

Q.—Were the kitchens separate from the hospitals, or attached?

A.—Separate.

Q.—Was there a tendency as time went on for the kitchens to partake of the character of poorhouses, or were they altogether restricted to dependants of people on works?

A.—In Viramgam there was such a poorhouse, for about 400 inmates; but it did not last long. Subsequently I obtained the Collector's permission to use the kitchens of certain works as poorhouses, because it was found that once a man was admitted to a poorhouse and allowed to stay there, doing no work for a week or so, it was impossible to get a day's work out of them again. Sent to the works they wandered about and returned as soon as possible. People looked with the greatest favour on poorhouses.

Q.—That is not the experience elsewhere; elsewhere a difficulty has been found to keep people in poorhouses?

A.—That is also true of this district, it sounds somewhat anomalous; but still a man who begged his way to the poorhouse would again escape in spite of attempts to restrain him. He preferred begging. There was still some charity in the bigger towns. These people were mostly of the ordinary beggar classes.

Q.—What general arrangements were made for the water-supply?

A.—It was under the control of the Public Works Officer.

Q.—I was told yesterday it was under the control of the Civil Officer?

A.—I should say it varied with the orders given by the Sub-Divisional Officer.

Q.—You would probably place such an important matter as that under the best man?

A.—Yes, and in my instance the best men were the Public Works subordinates.

Q.—Did you yourself issue any special orders with regard to the water-supply of your Public Works?

A.—No; they had all been issued beforehand.

Q.—What was their general character?

A.—In the case of one work a new well was found, sunk, and made *pakka*. There was a long trough, about twelve feet long, with wooden lids attached and bullocks were kept working it. Buckets were only allowed to be dipped into this trough, protected from dust by these lids. Any one could dip his own *lota* into a bucket.

Q.—Had you the plan of water-carts going along the works, giving water to people as they passed?

A.—Yes.

Q.—And when cholera came, did you disinfect your wells with permanganate of potash?

A.—Yes.

Q.—Was it introduced into the villages?

A.—Yes.

Q.—Did the people use it?

A.—I have doubts. Probably in one or two villages it was used, in most cases not.

Q.—When outbreaks of cholera occurred was there a peripatetic staff of Sanitary Officers going about into the villages disinfecting wells?

A.—The usual peripatetic staff of circle officers was entrusted with the work.

Q.—I have been told that these circle officers did not do what they were told; that they used to report that they had inspected certain villages, and their reports were not always to be trusted?

A.—Their work was very unequal. I should trust some and not others. They were mostly *karkuns* or *talatis;* in some cases outside men who had worked in mills. We gave them Rs. 20 with Rs. 15 horse allowance.

Q.—Besides these public works, did you make any attempt to organize small village works—tanks?

A.—Under the pressure of cholera, I commenced them in a part of the district where the people would not go to the larger relief works early in May.

Q.—How far were the relief works from these parts?

A.—About 25 miles.

Q.—Do you attribute any mortality in that area to the fact that these people were unwilling to go?

A.—Yes.

Q.—If relief works had been established in greater numbers in that part of the country do you think that mortality might have been avoided?

A.—Yes.

Q.—Did you employ the village agency in carrying out these village works?

A.—To a certain extent. A *panch* was appointed, rates were fixed on limited piecework, and payments were made weekly. The *chaukris* or pits were marked out, and muster-rolls were not kept. Measuring was once a week. Payments were made in the presence of the *panch* to the principal member of the family. They worked by families.

Q.—You did not pay the village headmen and let them distribute it?

A.—In no case.

Q.—Was that a successful system? Did it afford the necessary relief?

A.—Yes, and it was satisfactory to the people.

Q.—Was there much disease on these works?

A.—None at all.

Q.—Did you take care to clean the village wells and look after the water-supply?

A.—No; I think the people themselves did it.

Q.—Did you create this system of works on any large scale?

A.—Finally 17 similar works were proposed, but the rains came and stopped them.

Q.—If you had to do this thing over again, would you be disposed from the very commencement to have a scheme of small works ready to be brought into operation as soon as you thought fit?

A.—To some extent I am doing it over again now and I have begun with a system of small works.

Q.—In certain instances, no doubt, large works are desirable; but do you prefer small works as the backbone of your relief system?

A.—Yes.

Q.—Did you find the small works worked out in this way: that the people employed were the better class of cultivators, and that the day labourers were excluded and had to find their way to the large public works?

A.—To a certain extent, but the lower class labourers were also there. They had mostly gone earlier to the bigger works, but they were never refused permission on the smaller works.

Q.—It was found when tried on a large scale that it did work out in this way, that the works served to relieve these better class of people who were ashamed to go to large public works, although greatly in need of relief, and it gives them just that relief which is necessary, and in that way it served a useful purpose. Are you in favour of the system of small works from the commencement, or are you in favour of large works within a reasonable distance of people's homes, preserving the small village works for the hot weather in order to get the people back to their villages at the advent of the rains?

A.—That is not sufficient.

Q.—You would always begin with small works?

A.—Yes.

Q.—As to your village gratuitous relief; according to my lists in September and October you had none except perhaps the village servants in the villages?

A.—Village servants were not put on till later.

Q.—In October four villages were shown as having been brought on gratuitous relief, in November 35, and then on the 30th of December you show 308 villages. At the same time poorhouses appeared for the first time in your statement. In January there were 410 villages under the gratuitous relief and 13 poorhouses. February shows 463 villages under gratuitous relief and four poorhouses. In November when 35 villages were shown under gratuitous relief, I find that relief was actually given only to 72 people, so that the gratuitous relief on each village must have been very strictly administered?

A.—Very strictly.

Q.—Then we go to the next month when you had 308 villages under gratuitous relief and there were 412 people in receipt of relief and you showed 373 people on poorhouses and kitchens. Had you at that time of the year any system of excluding people from the village dole and sending to poorhouses and kitchens?

A.—They were not sent to the relief kitchens, and I do not think at that time of the year any such test was imposed.

Q.—Then I may take it that these people were on village relief at the end of December?

A.—Yes.

Q.—That was a considerable extension, an extension of about 13 per village?

A.—Yes.

Q.—Had the village servants been brought on the list at that time?

A.—Mostly.

Q.—Well, the relief lists kept pretty steady during February. There were 5,397 at the end of January and 4,616 in February if the figures are all right. I quite understand the increase between December and January; but why was there a fall in February continuing in March and in April down to 3,223? All this time the pressure was growing and your mortality was rising?

A.—Speaking for my three *taluqas* there are many villages belonging to Darbárs. I made arrangements with the Darbárs to call in all their people from the poorhouses.

Q.—Were these villages belonging to foreign states included in your returns?

A.—Yes.

Q.—Would that account for the whole fall?

A.—Perhaps not fully.

Q.—Was there any contraction in your gratuitous relief in these months, and, if so, was it due to any general order? Was there any order enjoining greater strictness in the administration of gratuitous relief during these months?

A.—No; I should say the strictness was in the beginning.

Q.—Do you think these figures may be relied upon?

A.—I do not think the dole figures can be relied upon in any way, for this reason: the dole figures are given by the *mamlatdárs* from the bills presented to the *taluqa* weekly. There are many instances of such bills being presented weeks late. In every case when the dole is shown as given in early December, it is absolutely certain that the dole was given in November. The poorhouses are shown as having been opened in December. I myself opened a poorhouse in November.

Q.—If we take the figures from December up to the end of April, we find that the January figures coincide with what you say; but the February, March, and April figures do not coincide; because there is a general reduction in the numbers given. From the figures it seems that simultaneously with the contraction in the village relief there was a very great increase in mortality from December. Your mortality was 5 in January, 7·32 in March, 9·4 in April. What I am anxious to know is whether these figures admit of any explanations. Your figures on works correspond to the growing scarcity—the figures on works went up regularly until the end of April and your gratuitous relief to dependants went up from 16,000 at the end of December to 52,000 at the end of April. Your numbers on poorhouses went up very greatly. Ought I to take the figures in poorhouses as supplementary to the doles—village doles?

A.—I think they should be so taken, for this reason that to some extent early in the year people having any supporters were not put on the dole. Very soon it was found that the poorer classes had quite enough to do to support themselves, and their dependants were put on the dole. It then very soon became apparent that the supporters very often lived on the dependant's dole and such people were therefore sent to the poorhouses.

Q.—How many villages are there in the whole of your district?

A.—884.

Q.—In May you brought 589 of these under the dole system and your numbers on the dole increased to 8,176; that is an average of about 13 or 14 per village at the period of the severest pressure. Do you consider that at that time, in May, 14 per village was an adequate number to be upon village gratuitous relief? I ask you that apart from the categories of the Code. From the point of view of relief administration do you think that was a sufficient number to be upon the dole at that period of pressure?

A.—I think it possible that a few more might have been added; but I think at the same time in May there were many who could have worked but were allowed on the dole because of the cholera scare.

Q.—The figures suggest that you took up in your villages a vast number of people who had fled from the works, and brought them on your gratuitous relief?

A.—Yes.

Q.—The numbers steadily rose after that. Was that because of the rain?

A.—Chiefly because they include a large body of cultivators.

Q.—What were the principles upon which you gave village gratuitous relief to cultivators?

A.—We had large sums of money received from the charitable funds for distribution. It was found that many people, especially in my sub-division, were willing to try manual cultivation. The money was not sufficient to go round for subsistence and also for seed; I therefore got sanction to put all cultivators on the dole. The principle that I worked on, in my sub-division, was that only genuine holders of land, or in a few cases, a man who could make arrangements with the *mukhi* of the village, could be put on dole for three days provided that within three days he began cultivating the soil. If he refused he would be struck off the dole; if he began, he would be kept on the dole, till his land was ready to sow. He then got a chit from the *mukhi* and received sufficient grain from charitable funds to sow his land.

Q.—You kept him still on gratuitous relief?

A.—Yes, I kept him on the gratuitous relief until about two months—practically until the crop came.

Q.—How many instalments of revenue have you in your district?

A.—Four; two for the *kharíf* villages and two for the *rabí* villages.

Q.—Do you divide your villages into *kharíf* and *rabí*?

A.—Yes.

Q.—In your written replies you mention a suspension of revenue; was that declared by order, or do you mean by suspension, merely that you did not collect?

A.—It practically means non-collection.

Q.—No orders have been issued regarding the recovery of the amount suspended?

A.—No.

Q.—In reply to question 91 you say private credit was very much shaken. Are the people in your district much indebted?

A.—They vary. An inquiry was made a year or two ago with the following results; that in Daskroi *taluka* for every acre in the hands of the *banias* there were 37 acres in the hands of the agriculturists. In Prantij—the worst *taluqa* in this respect—the ratio was 1:2, Dhandhuka 1:3, &c.*

Q.—That is about 3 per cent. deeply indebted?

A.—In Viramgam it was very high.

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* I gave figures for all *taluqas* but cannot remember all now.

Q.—By indebtedness you mean that they are irrecoverably indebted?

A.—Yes.

Q.—What is the recognised incidence of revenue on the produce in your district? What is the official view?

A.—I have taken as many crop experiments as I could find, and I should say that on the *kharíf* crops *bájra* and *juár* it varies from 12 to 15 per cent.

Q.—And on the other?

A.—I do not think the figures are very reliable. Cotton is 9 per cent., rice 18 per cent., irrigated wheat 4·73 per cent., on the whole I should say 15 per cent.

Q.—Are you in favour of a policy of suspension of revenue in bad years, say, when there is a failure of 10 to 12 annas of the crop? Would you be in favour of a suspension of the revenue from the cultivator recovering it subsequently in a good year?

A.—Yes.

Q.—Are you in favour of a policy of liberal *taqávi* on the occurrence of distress?

A.—Yes, if it is necessary.

Q.—Generally, do you think there is much room in your district for *taqávi* advances for making wells?

A.—The more wells, the better.

Q.—There is room for wells?

A.—Oh! yes.

Q.—And more money could be taken up and usefully expended in making wells?

A.—Yes.

Mr. Nicholson.—Are remission inquiries now in progress?

A.—Yes.

Q.—Is it a process of detailed individual inquiry?

A.—That would be impossible.

Q.—Then you are going upon the crop, the *rabí* crop or the crop which has failed?

A.—We are going mainly on annual estimates of the *kharíf* and *rabí* crops, village by village.

Q.—That is to say for each individual you are multiplying the area cultivated by him by an anna estimate, and you are arriving thereby at a certain outturn?

A.—Yes.

Q.—What was the nature of the crops in the two years preceding the famine? Were they up to average?

A.—For 1897-98 I adhere to my answers given. For 1898-99 I find that in the main I was right; but the cotton was not good. I also notice that in Viramgam all the crops were poor.

Q.—Leaving those two years out, had the results of the previous five years been such as to warrant the opinion that the district was in a normal condition, or in a distressed condition?

A.—I would point out that the waste lands have increased enormously.

Q.—In answer to question 66, you say the rolling-stock of the railway was inadequate to meet the demand?

A.—Rolling stock was inadequate.

Q.—Do you think the railways did all they could to bring the grass down?

A.—Yes.

Q.—You think if the rolling-stock had been diverted to grass, the grain might not have been imported. There might have been a grain famine instead of a fodder famine?

A.—Well, less grain would have been imported.

Q.—I think you had a number of orphans in your district.

A.—Yes.

Q.—Can you tell me how many there were? I mean deserted children?

A.—I am afraid I have not got the figures.

Q.—Were they very numerous, 5,000 or 7,000?

A.—More than that.

Q.—Ten thousand?

A.—Possibly.

Q.—In other words you had many thousands of children on your hands?

A.—Yes.

Q.—Were they found chiefly on works or were they found in the villages?

A.—They were found in the villages and drafted to poorhouses.

Q.—And how long did they remain in the poorhouses?

A.—As soon as there was a sufficient number they were sent to the orphanages.

Q.—Private orphanages or Government institutions?

A.—All private.

Q.—Under what conditions were they handed over to private institutions?

A.—I have a copy of the agreement* here that is taken from every person to whom the children were handed over.

Q.—When an orphan was found, was his name and description registered in a book where he was found, and so on?

A.—Yes, in every poorhouse.

Q.—There is a register then saying all that?

A.—Yes.

Q.—When were children drafted to institutions? Was an extract from these registers sent with them?

A.—Not invariably I should say.

Q.—I do not quite understand then how in the future it will be possible to identify the children; supposing a relation or parent comes forward, how can they be identified?

A.—As a matter of fact, speaking for my charge, they were all sent into one orphanage in Ahmedabad.

Q.—Is that a Hindu orphanage?

A.—Yes.

Q.—What is the nature of that institution? Is it a permanent institution or temporarily erected for the purpose?

A.—Permanent.

Q.—And the numbers over a thousand?

A.—I do not know.

Q.—Have many persons come forward subsequently to claim children?

A.—Not many.

Q.—Have many inquiries been made?

A.—Not to my knowledge.

Q.—In case of inquiries being made, were you able to trace the children?

A.—I know no instances of failure.

Q.—Did you take any steps to inform people in the neighbourhood of the villages that certain children had been found?

A.—No.

Q.—Is no effort of this kind being made?

A.—In many cases it would be impossible.

Q.—Do you not attach considerable weight to the maintenance of a register as described?

A.—Yes, I think it would be advisable.

Q.—And then you would also make provision for informing the relatives or the caste people that these children were in the orphanages, and had come from particular villages?

A.—Yes.

Q.—And then in case you were unable to trace them out, the orphans might be drafted to the central orphanage at the headquarters of the district where they might be kept for a reasonable time until further inquiries were made?

A.—Yes.

Mr. Bourdillon.—When the kitchens were opened, had employers of labour any difficulty in getting labour?

A.—It varied in different tracts.

Q.—Did you hear any complaints that the labourers were in receipt of gratuitous relief and could not be obtained when they were wanted?

A.—Yes.

Q.—I see you are a strong supporter of village works and you object to a distance test?

A.—Yes.

Q.—A system has been tried in some provinces that people living within a certain distance should only be admitted to the works on production of a ticket?

A.—If the staff is sufficient it could be worked.

Q.—You think it is worth trying where the staff is adequate, both in quantity and in quality?

A.—Yes.

Q.—Do you think that the mortality was much higher among the immigrants?

A.—In cholera time I think it was.

The President.—What proportion of the death-rate would you attribute to the immigrants on the whole?

A.—It varies somewhat in the different *taluqas*. I should say it must have been high among immigrants.

Q.—Would you say that 25 per cent. of your death-rate is due to immigrants in the three *taluqas*?

A.—I should say it may be 25 per cent. in Viramgam.

Rao Bahádur Syam Sundar Lal.—What proportion of the cultivated area has been thrown up since the revision of settlement?

A.—The waste land has increased 80 per cent. in Daskroi; 52 per cent. in Viramgam.

Q.—I should like to know what proportion of the decreasing cultivation is due to the relinquishments of the cultivators?

A.—I cannot say offhand.

Q.—What proportion of the *zeraet* land has been affected by the sub-soil water?

A.—All or very nearly all.

Q.—This shows there is great scope for sinking wells?

A.—Yes, a great number of wells have been sunk.

Q.—Since the revision?

A.—Since the revision.

Q.—You said that weekly payments are not good, because they force the people to run into debt. Could you not avoid their running into debt by giving them chits daily, a sort of order on the *bania* to pay so much daily ?

A.—The system was tried to some extent ; but it was found to be very cumbrous. It was not workable.

Q.—When were the village kitchens opened ?

A.—Late in the year : June I think.

Q.—What was the system of registering the mortality on the works ?

A.—It was done by the Civil Officer.

Q.—Who brought the news to the Civil Officer of the deaths that took place daily ?

A.—Those that took place in the hospital were reported by the Hospital Assistant and those that took place outside the hospital were brought to his notice by any of the *chaukidárs* or he saw them himself.

Q.—The majority of deaths took place in the hospital ?

A.—Yes.

Q.—About the orphans, were any efforts made to try to give them to the orphanages managed by people of the same religion as that to which the orphans belonged ?

A.—The bulk of them were given to the Hindu orphanages.

Q.—What proportion of them was given to the Hindu orphanages ?

A.—I am afraid I have not got the figures ; but I should think considerably over 60 per cent.

Q.—Were there Hindu orphanages in the district to which they could be sent ?

A.—Yes ; all the orphans had not been sent there, many orphans remained in the villages.

Q.—What do you think is the total number of orphans that have been made over to the orphanages in your district ?

A.—I am afraid I have not got the figures.

Q.—I would like to have a rough idea ?

A.—It may be 20,000 ; it is a pure guess.

The President.—Against what railway did you hear the most complaints ?

A.—The Tapti Valley Railway.

Q.—Had you any substantial reason for believing that preference was given by this railway to a more paying traffic than to fodder ?

A.—I could not say that.

* *Agreement as to Orphans.*

I hereby enter into the following agreement with regard to the children I offer to take from the poorhouse in the Ahmedabad district :—

(1) The children are to be taken and cared for on behalf of the mission I represent, so that in the event of my dying or leaving my present post or place of residence, the care of the children will be transferred to my successor.

(2) In the event of the lawful guardian of any child applying for the custody of such child after the famine, I shall, on satisfactory proof of lawful guardianship, make over such child to such lawful guardian.

(3) All children retained by me will be suitably fed, clothed, and, as far as possible, educated and started in life when of suitable age.

(4) I will not remove the children from Ahmedabad district before I receive permission from the Collector to do so.

[*The witness subsequently wrote :*—]

In returning the amended proof of my oral evidence taken before the Famine Commission I would point out that there are many omissions. The most important is perhaps my partial explanation of the great decrease in Jerayet land cultivation. I offered two explanations.

The heavy assessment caused by sub-soil water assessment in cases where (1 manure was limited, irrigation being useless without manuring.

(2) As pointed out by Mr. Mehta, where the subshares were so small and scattered that an occupant had no one piece of land large enough to make it worth his while to dig a well.

In both cases the land is assessed for certain capabilities of which the occupant cannot avail himself.

2. I may add that I subsequently put in a statement showing the decrease in occupied lands in the *talukas* where it was most marked, differentiating between occupied fallows and occupied cultivated land. The statement originally submitted with my written answers was prepared hastily in the office in my absence and I withdrew it, substituting the fresh statement to which I have alluded.

I put in a statement showing for each *taluqa* of the Ahmedabad District the areas of—

(1) Areas actually cropped.
(2) Fallows (occupied).
(3) Unoccupied assessed land.
(4) Total cultivable assessed land for the years 1887—1900.

This shows he changes in cultivated area and in unoccupied area before and after the revision settlements. It will be noticed that the cultivated area has decreased everywhere but the decrease is most marked in Daskroi and Viramgam and in these *taluqas* (as also for Prantij) the decrease has attracted attention and the question of over-assessment is under consideration.

The actual area cropped in the famine year is also shown and a comparison with the average cropped in the past five years shows the percentage to the normal area cropped at 11·5 per cent.

The figures given in my printed answers to the questions of the Famine Commission (Appendix B) were wrongly prepared in my office in my absence The figures now given are for Government villages only, no reliable statistics from *talukdari* villages being obtainable.

Rayatwari villages, Ahmedabad District.

Revision Surveys.

Daskroi	...	...	...	1889-90 and 1890-91.
Viramgam	...	...	...	1890-91.
Sanand	...	...	...	1892-93.
Prantij	...	...	...	
Modasa	...	...	...	
Dholka	...	...	...	1888-89.
Dhandhuka	...	...	...	1892-93.
Gogo	...	...	...	

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Statement showing total areas sown, kept fallow and unoccupied assessed waste in Rayatwari villages of Ahmedabad District.

Description.	Taluqas.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	Average of five years.	1899-1900.	Remarks.
Area cropped.	Daskroi ...	...	1,34,548	145,030	145,454	...	...	143,089	137,990—0	131,084—26	131,689—10	127,373	130,427	131,312—31	26,535	
	Dholka ...	140,497	139,569	142,117	142,213	...	...	140,308	130,989—21	128,726—27	125,449—23	128,918	132,239	129,264—22	16,997	
	Dhandhuka ...	...	...	...	52,279	...	...	49,841	47,861—18	47,004—25	46,282—19	45,990	47,033	46,834—12	2,224	
	Viramgam ...	...	...	155,517	163,495	...	...	151,713	135,213—38	139,901—30	136,282—7	144,266	148,332	140,799—7	6,551	
	Sanand ...	...	...	...	83,725	...	...	79,323	73,254—32	72,227—36	72.742—18	74,996	77,040	74,052—9	9,201	
	Prantij ...	...	...	...	117,058	...	...	109,696	78,687—29	89,964—14	92,098—3	96,835	105,319	96,580—33	10,059	
	Total ...	...	...	...	704,224	...	...	673,970	623,997—19	608,909—38	604,544—0	618,378	6,40,390	617,243—35	71,567	
Fallows.	Daskroi ...	...	22,214	11,347	8,444	...	...	12,648	16,963—13	21,517—11	19,171—36	21,481	17,433	19,313—12	118,847	
	Dholka ...	25,226	22,349	20,892	19,997	...	...	23,136	31,977—23	32,243—26	33,003—8	29,808	26,490	30,704—19	140,642	
	Dhandhuka ...	...	...	...	6,688	...	...	7,786	9,859—8	10,820—23	10,774—6	11,048	9,268	10,485—39	53,613	
	Viramgam ...	...	...	24,729	17,231	...	...	30,565	46,478—20	37,468—27	36,292—10	25,531	21,467	33,447—19	162,866	
	Sanand ...	...	...	...	18,545	...	...	24,654	29,642—33	29,145—38	17,396—35	24,718	22,754	24,731—21	90,266	
	Prantij ...	...	...	...	6,732	...	...	13,497	18,175—23	18,287—9	13,301—35	9,595	8,370	13,546—17	95,979	
	Total ...	...	...	...	77,637	...	...	112,286	153,097—0	149,483—14	139,940—10	122,181	105,782	134,096—29	662,207	
Unoccupied waste.	Daskroi ...	...	10,062	10,488	12,747	13,001	11,000	10,427	11,118—12	13,500—13	15,955—34	18,169	19,081	15,564—36	20,679	
	Dholka ...	16,249	16,997	15,976	16,827	16,725	16,122	15,405	15,889—17	17,856—8	20,407—22	20,224	20,250	18,925—17	21,363	
	Dhandhuka ...	...	...	...	1,908	1,791	1,563	1,586	1,565—39	1,445—29	1,486—15	1,772	2,391	1,732—8	2,700	
	Viramgam ...	...	...	7,013	5,925	5,810	4,865	4,855	5,438—35	9,647—21	14,370—39	17,235	17,229	12,784—11	17,562	
	Sanand ...	...	...	...	7,257	6,307	4,699	4,758	5,727—13	7,079—1	8,304—4	8,976	8,784	8,174—3	9,154	
	Prantij ...	...	...	...	26,133	24,574	23,481	26,108	32,414—1	41,186—22	46,264—0	46,457	40,778	41,419—37	46,307	
	Total ...	...	...	...	70,797	68,208	61,731	63,139	72,153—37	90,715—14	106,788—34	112,833	108,513	98,200—33	118,065	
Culturable area.	Daskroi ...	..	166,824	166,865	166,645	...	...	166,164	166,071—25	166,102—10	166,817—0	167,023	166,941	166,590—39	166,061	
	Dholka ...	181,972	178,915	178,985	179,037	...	...	178,849	178,856—21	178,826—21	178,860—13	178,950	178,979	178,894—19	179,002	
	Dhandhuka ...	...	...	...	60,875	...	...	59,213	59,286—25	79,270—37	58,543—0	58,810	58,692	62,920—20	58,537	
	Viramgam ...	...	...	187,259	186,651	...	...	187,133	187,131—13	187,017—38	186,945—16	187,032	187,028	187,030—37	187,279	
	Sanand ...	...	...	...	19,627	...	...	108,735	108,624—28	108,452—35	108,443—17	108,690	108,578	108,557—32	108,615	
	Prantij ...	...	...	...	149,923	...	...	149,301	149,277—13	149,438—5	151,663—38	152,887	154,467	151,546—27	152,345	
	Total ...	...	...	...	852,658	...	...	849,395	849,248—0	849,108—26	851,273—4	853,392	854,685	851,541—14	851,839	

Year of revision survey shown in black figures for 1891-92 and 1892-93 not obtainable.

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Mr. P. J. Mead, I.C.S.

Answers by Mr P. J. Mead, I.C.S., Acting Collector f Ahmedabad, to questions drawn up by the Famine Commission.

1. Good. 1897-98 was an unequal harvest; 1898-99 a fair one.

* Appendix A. I quote Mr. Gibb's notes* for the 1897-98 season. I was personally in charge during the monsoon of 1898-99 and the rainfall was above the average. I travelled as Assistant during the fair season and can say with some certainty that the principal kharif and rabi crops were fully up to the average. There is little or no cotton in the First Assistant's charge, and I cannot say whether the crop was a good one. The same applies to the unirrigated wheat in the *Bhál* tracts. I am sending this off at once as it is urgent, but will, on my return to head-quarters, see if Mr. Gibb has left any fuller notes on these crops.

Appendix B. 2. I append a table† showing the approximate area sown in the monsoon of 1899 and the approximate areas sown in the five preceding years (accurate figures of areas sown with kharif are not obtainable). From this it will be seen that the percentage of the normal kharif-sown area was 12·7 per cent., sown in the monsoon of 1899.

3. (*a*) 30 feet.

(*b*) 4 feet on an average. 13 per cent.

(*c*) Practically at the end of June, except in Dhandhuka where 3·67 fell in August and 1·90 in September; and in Modása and Gogho 71 cents fell (July) and 1·36 (September) in Modása, and 1·71 (September) in Gogho.

‡ Appendix C. (*d*) I append a table ‡ showing (*a*) from the statistical atlas the average rainfall month by month and táluka by táluka taken for the years 1876—86 and (*b*) the same details for the monsoon of 1899.

4. 1 per cent.

5. (*a*) 50 per cent.

(*b*) 12 per cent.

6. Test works were opened.

7. Increase of wanderers and beggars in the big towns and cutting of trees everywhere and petty pilfering, joined with our knowledge of the complete failure of all crops and the fodder famine which began early.

In every táluka except Gogho Mahál small test works were opened by the Táluka Local Boards. These were followed by a big relief work on the Malek Sabhan tank to meet the increasing demand for labour near the city and by other works at

Chandola tank and Panar Dediasan Channel to relieve the Malek Sabhan work which was overcrowded almost immediately. Village doles were not started till later. Takávi was also freely given to cultivators to raise well irrigated crops (R4,91,008) and fodder crops in particular. Cattle camps were started and cattle were also sent to Thána and Dharampur forest. In this way 595 head of cattle were saved and 1,911 lost in Thána, 768 saved and 396 lost in Dharampur, 2,868 saved and 880 lost in cattle camps. The percentages work out to 23 per cent. Thana, 63 per cent. Dharampur, and 76 per cent. saved in cattle camps.

9. (*a*) The famine relief programme was absolutely inadequate. A few works were only entered, and for these surveys and estimates of cost were ready. Many of them were found to be unsuitable owing to the want of drinking-water in the locality. On the other hand a list of irrigation tanks needing repairs, though not meant for famine relief, was found very useful.

(*b*) No.

10 Large public works. No programme of small village works was kept ready in reserve.

11. (*d*) The City Relief Fund, managed by the Collector, helped private charity to open cheap grain shops in the city. Opened in November 1899 closed in March 1900.

(*a*) Test works.

(*c*) (i) On the first two relief works.

(*b*) Poor-houses (followed by village doles).

(*e*) Opening Government forests in Thána.

(*c*) (ii) Kitchens in the bigger villages in June.

12. (*a*) and (*d*). Circles were formed and Famine Circle Inspectors were appointed early in December. At the same time Mámlatdárs were relieved of all criminal work, rent and possessory suits by special Aval-kárkuns and placed in charge of all famine operations in their tálukas. The Sub-Divisional officers were also relieved of their criminal work. A Personal Assistant was appointed to the Collector, relieving him of much of his routine work and taking charge of the home táluka (Daskroi). This left Mr. Emanuel, I. C. S., with one táluka and one mahál only to supervise. Mr. Alcock, I.C.S., was put under me as Special Revenue Officer to help in the supervision of the Viramgám Sub-division, of which I held charge throughout the year. Later on the following extra staff was employed to help in this work :—

Viramgám Sub-division.

Lieutenant Tatum, I.S.C.	
Mr Rothfield, I.C.S.	
Mr. Davies. Mr Fern Mr Laughton. Mr. Boyd.	Salt Department.
Rao Sáheb Waman S. Nabar. Azam Gulabrai Dhirajram. Mr. Govindlal Venilal.	Chiefly for takávi and charitable distribution at end of hot weather.

Sánand and Dholka.

F. B. Garda. Harry Smith. O. Rubbert.	Mr. Alcock also took sole charge of Sánand Táluka late in the hot weather, when Mr. Rothfield came to Dhandhuka.
Mr. DeSouza. Mr. Byramji Muncherji.	Salt Department.

Parántij and Modása.

Captain Ford, I.S.C.	
Mr. A. Reuther.	
Ráo Sáheb Dalpatram Bapuram.	
Ráo Bahádur Jethalal Varajbhai.	Chiefly for takávi and charity distributions.
E. H. Wallace, Esquire, I.C.S.	Chiefly for criminal work.

Daskroi.

Messrs. Rothfield, I.C.S., and Dutt, I.C.S., till Mr. Rothfield came to Dhandhuka in the hot weather.

(*b*) No special staff was entertained.

(*c*) Managed by Sub-Divisional officers.

13. Yes. The subjoined table gives the figures *up to March 31st.* Other figures available if wanted.

Act.	Amount.	Object.
	Rs.	
XIX of 1883 .	1,55,000	Wells (one case to complete a *bándh* thus employing labour).
XII of 1884 .	3,35,000	Seed and well apparatus; fodder.

Conditions.—At the outset under the usual rules.

Classes.—Cultivators entirely.

Recoverable.—Under the ordinary rules. Special concessions have been granted for loans given for kharif crops in the past monsoon only.

14. Yes, in most of the district In the *Bhál* tract of Dholka and Dhandhuka and some of the salt lands in Viramgam and the Nalkantha wells cannot be sunk. Depth varies from 10 feet in Parántij Bheja villages to 30 feet in parts of Dhandhuka.

Digging of wells was encouraged everywhere:

(*a*) in Gogho some kharif crop was secured, in other tálukas rabi crops were raised, but the outturn was miserable though in many places crops looked well at first. Hot weather jowari was, however, a fair *fodder* crop,

(*b*) a small percentage only have been made permanent,

(*c*) very little outside labour was employed in this way.

15. I append a list* of test works under District and Táluka Local Boards and Municipalities. They were ordinary works, but were supervised from a famine relief point of view by the District officers. * A

16. Piece-work taken and the rates approximated as far as possible to the wages earnable under the Famine Code. Payment was therefore by gangs not by individuals.

17. Yes, no maximum or minimum wage and no allowances.

18. No test works were converted into regular relief works, but the latter were started as soon as the necessity appeared. Test works practically did not serve their purpose. The first big relief work was, as stated above, started to relieve the hordes of immigrant beggars, chiefly Marwaris—and the next two were started to relieve the first work Subsequently works were started in each táluka when it was found that very few came from any distance to the big works.

19. Large Public Works.

20. The first work was under my control as Special Civil officer. The Public Works Department managed the work professionally throughout. The second and third works were under Public Works Department management entirely, a Special Civil officer being appointed under the Public Works Department Supervisor. No scale of supervising establishment had been prescribed, but the establishments were procured without much difficulty. There was very little delay in opening, and tools and plant were available to begin with, but fell short of the great demand. The establishment also fell short and was not reinforced quickly enough.

21. Each work was a separate charge at first, but subsequently two tanks were under one officer; in some tálukas 5,000 was the average maximum. It was exceeded in Daskroi (near the city) and new works were opened and the pressure relieved by drafting.

22. Each charge had its own establishment. This varied greatly. Besides the Public Works Department officer in charge, a Special Civil officer was appointed with a sufficiency of Kárkuns, and a hospital assistant was in charge of the hospital on most works. On the first work hutting was only gradually organised. On the other, the Public Works Department arranged beforehand in accordance with the Famine Code. Bhangis were organized and latrine trenches dug. Special water carriers were organized and no vessels were allowed to be dipped into the wells themselves; labourers all drawing from big troughs, filled by the special staff. Baniahs erected shops in selected sites and hospitals were started.

23. Admission free. Residence was compulsory. No distance test was insisted on, except in so far that big central works only were started, so that most of the workers had to come from a distance. An attempt was made to draft residents of Ahmedabad city to more distant works.

24. In my opinion a large work of 5,000 people will serve efficiently an area of 300 miles or so. Professional workers—Marwaris, Ods, etc.—came from

any distance, but ten miles was about the limit for most Gujarat villages.

25. Public Works Department officers were subordinate to the Sub-Divisional officers except in matters of professional detail.

26. Yes. Kárkuns (clerks) till the supply failed and then from Talátis (Village accountants). Their pay varied from R30—50. He was subordinate to the Public Works Department officer in charge.

I have not the Famine Commission Report with me in camp, but the Special Civil officer made weekly reports through the Public Works Department officer in charge and witnessed measurements and payments. In several cases they did mention slackness on the part of Public Works Department officers and inquiries were made.

27. No. Public Works Department officer.

28. Fifty to a gang. Applicants were ganged up as they came: as far as possible people of one village were ganged together. This was fairly successful, the Public Works Department officers being generally sympathetic.

29. I give the orders of Government regarding classification and wage scale side by side with those* recommended in the Famine Commission Report (which will be filled in by the office in Ahmedabad). Speaking from memory, I do not think there is much divergence. My experience does not lead me to find any fault with the classification and wage scale ordered by the Bombay Government from either point of view. Only strong professional workers were allowed in Class I.

*Appendix E.

30. I am inclined to think that no changes are called for. The absence of distinction certainly gave rise to no difficulty, and the women in Class II did as much work as the men. Financially considered, a lower rate to women would have effected large savings, but experience only can say if the women would have deteriorated on a lower wage. The experiment might be tried with advantage.

31. The task system was commenced with and subsequently the stronger gangs were tried on piecework on the same work.

32. As distress deepened it was found that piecework was unsuitable except on small works near the people's homes.

33. The full Famine Code task was exacted from the outset from all. No allowance was made for the distance workers had come. In some cases tasks were reduced on the soil being found especially hard. I know of no instance in which the task was raised. On the minor works started primarily for Tálukdárs but thrown open to all who would not leave their villages, 75 per cent. of the Code task was given and 75 per cent. of the Code wages. These were non-residential works. No changes in the task were made for any particular classes of persons.

34. Adequate. Those who came on the works in good condition and got quickly habituated to the conditions under which they had to work did very

well. New gangs frequently suffered at first, and most cases of sickness or deterioration of condition occurred in the first fortnight. I attribute this largely to the weekly payment system. I do not think workers saved anything. When the cholera broke out and workers ran away, they were very soon in great straits Payment was mostly in silver coin. Small coins were always procurable in large numbers from the Banias on the works and in the nearest towns. In one táluka the Banias were found to be sending away all small coin to the Native States.

35. A rest-day wage was given. I have no experience of the other method, but see no objection to the rest-day wage.

36. There was hardly any fining in my district.

37. The minimum wage was always allowed—*vide* above.

38. Weekly payments. I feel certain there is much danger in this though the larger proportion of workers on any work visited were managing well enough.

39. To obviate the difficulties of new comers a daily advance of one anna was allowed, if asked for, but I frequently heard complaints up to the very end on works otherwise excellently managed and am convinced that in many cases these new comers did not apply at the right time or to the right person, and got nothing. Some were discouraged and left the works and many ran down in condition very much during the first fortnight. *The Banias would not lend to new comers* on these big works, where labourers in many cases were from very distant villages. Daily payments would work excellently if more Cashiers were employed. The weekly payments were always made on the "Chowkdis" (pits marked out) and each gang was called up and paid separately, thus taking them away from the work for a short time only. All was finished in the day on the biggest works. This could certainly be done daily with adequate establishment and is of vital importance. Workers must be fed properly when they are beginning, and I feel fairly certain that the bulk of the sickness on works was due to improper food and clothing (they often sold or pledged their clothes and cooking pots at first) at the outset. I admit that daily payments would probably increase the number of people who try all works in turn and thus add to the work of the Public Works Department subordinates, but I am convinced that the works would be more popular (which was the chief desideratum in my district) and that there would be far less sickness.

40. To the individual in nearly every case this is best except in the case of old and settled gangs, with a self-elected headman.

41. *Vide* answer to 9.

42. Where payment by results was tried, the recommendations of the Famine Commission were followed.

	Class.	43. The money equivalent of these was worked out as laid down in the Ready Reckoner, Appendix 5, Famine Code.
19 chataks	I	
15 Do.	II	
10 Do.	III	

Children under 8 were fed in kitchens. Weakly persons capable of some work fell under Class IV and received the minimum (12 chataks for adult, 7 for 4). They were given task work, but did very little. Such people are, I think, better in a poor-house with a work attached. They mostly did the work of stamping down and levelling tank banks but very little attempt was made to exact any prescribed task from them.

44. No.

45. No muster rolls kept or other arrangements made.

46. The scale is fixed by Government. The Special Civil officer under orders from the Mámlatdár gave the ruling prices of bájri and jowari, whichever was the cheapest. Small variations were neglected.

47. Providing tools and plant, marking out and measuring were done by the Public Works Department and I know nothing about it. The wells for drinking were all fenced off, and a brick chunam trough made, into which workers were allowed to dip their buckets. Hospital arrangements were under the direct supervision of the District Medical Officer, but were inspected of course by all District Officers. Indents were made on and staff establishment supplied by the District Medical Officer. All new comers went to the Special Civil officer's office, marked by a flag, and those were admitted, all dependants getting a kitchen ticket and all workers being sent to a Public Works Department clerk who ganged, classified and registered them and set them to work. The classification was checked by Visiting District officers, but the Public Works Department did the work well. Dependants having tickets were fed twice a day in the kitchens. In some cases nurses were found necessary to collect the smaller children from the works as well as to look after them in the kitchen. Babies in arms were provided for by the grant of one pice extra to nursing mothers. Where either seemed much pulled down, both mother and baby were admitted to the kitchen and dieted by the hospital assistant on the work. They were not generally taken to the hospital because they dreaded the name of hospital, but such expenditure was shown as hospital expenditure.

Wages were paid and fines imposed by the Public Works Department. Both were closely watched by the Special Civil officer and the Visiting District officers.

48. By the Local Government. The Collector, in consultation with the Executive Engineer, issued orders independently if urgent, and was never overruled.

49 and 50. Wanting.

51. No.

52. Small works were utilised in Dhandhuka and Viramgám to provide employment for those who would not join the more distant big works (Táluk-dárs and others) and in other places to provide for those who had run away when cholera attacked the big works.

53. All tanks.

54. (*b*) Civil Agency.

(i) Direct management.

55. Not under *b* (ii).

56. No. Piece-work with maximum of

A.	p.	Class.
1	9	I
1	6	II
1	0	III;

grain was then at the rate of 18 lbs. per rupee. All classes were finally admitted.

57. Not tried.

58. Small works not allowed within 5 miles of big works. Small works only filled by applicants from neighbouring villages. The wage was lower than on big works and there was no competition between the two.

59. Big works with the flimsy huts of the Public Works Department are most unsuitable in the really cold weather in Gujarát (January and February). Many got into a very low condition before they would go far afield to a big work, and many finally drifted into poor-house or on dole. Small works are also most necessary in the hot weather when cholera is likely to break out. I think small works should always be ready and, in any tract where people linger on too long in their homes, should at once be opened. Early in the hot weather the big works should close and small works be taken up. Managed under Civil agency with lower wages and no hutting they are both more economical and far more effective. At the same time, at least one big central residential work is necessary for wanderers, professional workers and the weaker cases. I would attach a poor-house and hospital to such central work and draft to it in cases where I considered people were working close to their homes who did not need such relief. My experience is that in certain tracts and in the cold weather many people prefer to linger on till it is too late to save them, or at any rate to get them fit for work, in preference to going 12 miles to a work and living away from their homes.

60. There are *Bhils* in Modása and many came in from Native States. The immigrant *Bhils* were very backward to take relief. Later in the year more success was obtained, but throughout the poor-houses were heavily crowded and doles were heavy. Road side deaths were very common.

61. No.

62. No

63. No.

64. No.

65.—

66 and 67. *Vide* answer to 9. Grass was also largely imported, and by an arrangement with the Charitable Relief Fund was retailed at R2 per 1,000 lbs. Had the rolling-stock of the Railways been adequate to meet the demand and had grass been delivered earlier and in larger quantities, still more good would have been done. About 155 lákhs of lbs. were supplied to the people, mostly at R2 per 1,000 lbs.

68. (*a*) Kitchens.

(*b*) Dole if necessary, but wages were supposed to cover dependants.

69. A grain dole. This is the only practicable form on a large scale.

70. All classes were admitted to kitchens and poorhouses. Such as would not go, were relieved under Section 150, Famine Code, or by charitable funds. I may mention that Bhât, Châran, Gâmeti, Khârwa and Kathi women who are not *parda* but never work in the field, were held to be admissible to a weekly dole of 7 lbs. of flour at their houses (Section 150, Famine Code). At the beginning of the rains the families of petty cultivators were allowed on dole till a crop was ready. These were struck off dole and relieved by charitable grants or takávi as soon as possible.

71. 13. End of November 1899 for the most part. The lower classes and all beggars including Bráhmins.

Numbers were very large at Dhulia Kote (near Ahmedabad), Modása and Viramgám. The maxima must have been 2,000, 15,000 and 1,000. I write from memory.

72. Yes. It was never considered a punishment to go to a poor-house. Great difficulty was felt in drafting those who have recovered strength to works. They usually returned.

73. Yes.

74. (*a*) 59.

(*b*) None now. 7 remained open. About 5 miles radius was supposed to be served. Three miles is nearer the mark.

75. Same as poor-house. Twice a day at fixed hours. Fed on premises.

76. No, no.

77. Restricted to those entitled to a dole under the Code.

74 (*sic*).

Items.		Adults.	Children	
			Age 8 to 12.	Under 8
		Oz.	Oz.	Oz.
Grain		15	9	7
Other items.	Dal	2	1	1
	Salt	½	⅛	⅛
	Ghee	½	¼	¼
	Condiments and vegetables	½	¼	¼

Khichdi in morning.

Chappaty in evening.

A hospital was always attached and sick cases were dieted.

75 (*sic*). Circle Inspectors and Talátis. They were checked by Circle Inspectors and all District officers in all villages visited. Circle Inspectors visited each village once in 10 days and other officers at longer intervals.

76 (*sic*). (*a*) Grain.

(*b*) Daily.

(*c*) At a fixed place; (*b*) and (*c*) weekly doles of flour (7 lbs.) at their houses were allowed under Section 150, Famine Code, to *pardanishin* women.

(*d*) In Modása cash was given in such villages as had no resident *bania*.

77 (*sic*). None except from charitable funds—*vide* 9. For doles to culvators' families.

78. Bráhmins wherever obtainable as was generally the case. No reluctance was noticed.

79. Talátis. Supervision and check exercised by all District officers.

80. In Ahmedabad City (*vide 9*). For the poorer classes. It was managed by the Municipal President, Mr. Manibhai P., and not by Government officials. One or two Missionaries did the same. I cannot say what the cost was. It was found difficult to prevent people getting grain cheap and selling cheap to banias. Some relief was doubtless afforded. Only small amounts were given as a rule, but in Viramgám larger amounts were allowed to those who came from a distance.

81. Prices which would have been forced up by speculation may possibly have been kept steadier, but on the whole they did not affect imports or prices.

82. (*a*) 9,73,000 out of a demand of 15,43,000.

(*b*) Not settled yet.

83. Individual inquiry. Not on crop failure but on the capacity to pay. This was determined by the Talátis (Village accountants) checked by Circle

Inspectors, Mámlatdárs, Sub-Divisional officers and the Collectors.

84. Suspensions were declared by the end of the year after the date of the last instalment. No attachments were made except by order of the Sub-Divisional officer.

85. In tálukdári villages rents were collected where possible except in the villages belonging to the Limdi Darbár where all was remitted. Very little was collected anywhere, as there were no crops to collect from. I heard very few complaints from these tenants-at-will of the petty tálukdárs.

86. No. Working as we had to with the very imperfect machinery of Village accountants, the greatest care was taken to give the benefit of the doubt to all cultivators and the amount collected was small.

87. No.

88. Dole list varied in different localities and at different times. In some places they were, I consider, excessive; while in others village officers had to be stirred up to put more on.

89. Lower classes mostly. About 10 per cent. of relief workers were occupancy tenants.

90. No experience of former famines. People were mostly unready to come on relief, and this was the paramount difficulty in my district.

91. Private credit was much shaken. People sold their rafters and tiles off their houses before coming to us for relief.

92. Yes. In my district.

93. No further tests wanted.

94. Entered in village registers by mukhis and checked by inspecting officers.

95. The high mortality noticed, more particularly in all kasbas and big towns, was mainly attributable to unsuitable food in my opinion.

96. During the cholera epidemic no doubt wells must have become contaminated. Permanganate of potash was invariably employed, twice a week in most municipal towns. Village mukhis were also given supplies, but it is hard to say how much they used them.

97. (*a*), (*b*), (*c*). Latrine trenches were always dug and a sufficient staff of bhangis employed. The officers in charge of these institutions looked after this and inspecting officers kept them up to the mark. They were mostly good.

98. Regular inspection. Occasionally inferior grains were found and condemned. The workers mostly went on rest-days to the nearest big available market where they could buy cheap.

99. The nal root "bid" was much used by men and cattle. It had an irritating effect on the bowels after some time and many got weaker and weaker and finally died when put on dole.

100. Enormous to commence with. The Darbárs were repeatedly called on to remove their subjects and did so at intervals.

I estimate that 20 per cent. of the numbers relieved on works and poor-houses may have been from outside.

101. The mortality was much higher among immigrants especially in Modása. Many of the deaths must have gone unrecorded, but in large towns like Ahmedabad and Viramgám the death-rate was swelled enormously by these immigrants.

102. Made over to native institutions and missionaries. Many are, however, still in the villages.

103. None.

104. The rolling-stock was absolutely incapable of coping with the demand, and private grass importers were kept waiting for trucks over a month to my knowledge after having bought their grass at the station of despatch. Complaints were also made that no truck could be obtained without bribing the Station Master. The local price of grain food was not raised.

104-A. Post-cards were sent by Station Masters to the Collector. No information was received from the banders or about road traffic. The statistics were reliable as far as they went. About 50 per cent. of assumed consumption was imported.

105. Not till the rains fell. When some complaints were received. Works were mostly closed and doles reduced almost immediately.

106. No.

107. Partly. Both are given. Cash wages are fairly high for labour generally.

108. No. Except in the case of small village kitchens and doles to (*a*) cultivators at the beginning of the cultivating season, (*b*) those who ran from cholera-stricken works. Also cash advances were not given in accordance with Section 84 (*b*) to people drafted on to works. In certain tálukas, where distances were very long to the nearest works, people were sent *viá* certain villages 12 miles distant where they received a grain dole. The advantage of feeding a man after he has gone his 12 miles, and proved his intention of really going to the work and not before, is obvious. All these innovations were necessary, I consider.

109. Yes. No native officers or non-commissioned officers were employed. Sepoys were usefully employed in helping to gather wanderers into the poor-houses. The Inspectors of the Salt Department were the most useful as they know the language. Two men were also received from the Postal Department and did good work.

110. Missionaries helped everywhere and did excellent work. Their services were invariably accepted when offered. One of them managed a big poor-house and before that a work-kitchen with great success. Several native gentlemen also did most excellent work in managing poor-houses.

111. There were no such *changes*, having effects upon the numbers of applicants or the death-rate. The distance test, imposed by virtue of the few works only opened in each táluka, undoubtedly

caused much distress. It is impossible to tell how far the death-rate was affected, but I am perfectly sure that many were much reduced and either came to poor-house or dole or died in the Dhandhuka Bhál. More would have died undoubtedly, had not the small works been started. Everywhere except in Gogho the greatest reluctance was evinced in leaving homes and going to a distant work, and the arrivals on such works were often in very poor condition and had to be sent to a poor-house.

112. I have not noticed any such results. Families mostly moved bodily and lived separately on the works.

P. J. MEAD,

Camp Fatehpur, Collector.

5th January 1901.

APPENDIX A.

The rainfall was light but almost continuous and first rate crops of kharif dry-crop were expected, but heavy late rains in September damaged much of the bájri, especially that sown late and some of the jowári. In Viramgám and Sánand the jowári, much of it, had little or no grain in it at all though the stalks were large and at a little distance; the fields just before reaping looked excellent. In Daskroi the same was the case to some extent, but in the neighbourhood of big towns jowári commands a high price as fodder and much of the Daskroi jowári is grown only for fodder.

In Paránti j the jowári appears to have suffered much less than in the aforesaid three tálukas. As to the rice crop much land remained unsown in the Sánand Táluka, probably half the rice lands; also a disease, 'kamodia,' affected the late sown kamod rice. On the whole in Sánand the rice crop was fair where there was any.

In the cotton and unirrigated wheat-growing tracts (which are in the west and south of the district) the season was excellent. Much of the effects of a bad rice season was also compensated for to some extent by the excellent crops of irrigated wheat and barley. The irrigated wheat and barley in Daskroi was excellent. The heavy rain which fell in September in Daskroi did not fall in Modása, and there was not as much rain as usual. A storm in February might have been expected to damage crops, but did not do so.

APPENDIX B

Táluka.	Area sown in						Average of five years, *viz.*, 1894-95 to 1898-99.
	1899-1900.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	
1	2	3	4	5	6	7	8
	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.
Daskroi	24,038 0	129,294 5	127,164 1	130,448 15	125,233 0	126,303 0	127,688 20
Dholka	19,179 0	192,339 25	178,845 11	165,333 17	174,066 0	185,641 0	179,245 2
Dhandhuka	8,436 0	267,603 23	175,526 26	147,280 7	204,406 0	120,435 0	183,050 9
Viramgám	36,175 0	190,016 32	150,470 32	136,621 9	152,692 0	131,088 0	152,177 30
Sánand	9,099 0	88,743 19	72,237 14	73,073 16	83,210 0	86,898 0	89,832 17
Parántij	11,159 0	160,144 0	136,135 2	110,902 39	140,944 0	148,236 0	132,272 16
Total .	108,086 0	1,028,141 24	840,379 6	763,695 23	880,551 0	798,601 0	855,266 14

APPENDIX C.

Table showing the average rainfall between the years 1876—1886, and that for the monsoon of 1899 in the Ahmedabad District.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.	In. cts.
Ahmedabad . .	0 1	0 3	...	0 1	0 53	3 64	13 54	6 37	5 6	0 68	...	0 5	29 92
						3 8	*0 13*	*0 2*	*0 23*	...			*3 46*
Parántij . .	0 8	0 2	...	0 1	0 39	3 3	12 45	8 38	5 9	0 57	...	0 6	30 8
						2 50	*0 30*	*0 7*	...	*0 12*			*2 99*
Modása . .	0 11	0 3	0 9	...	0 66	3 4	14 36	10 28	8 4	0 60	...	0 11	37 32
						2 97	*0 71*	...	*1 36*	*0 24*			*5 28*
Sánand . .	0 7	0 1	...	0 3	0 53	3 58	13 57	6 93	5 25	0 98	...	0 14	31 9
						6 42	*0 9*	*0 3*	*0 67*	...			*7 21*
Viramgám . .	0 4	0 15	...	...	0 33	3 16	13 14	5 89	4 76	0 73	...	0 2	28 22
						4 42	*0 10*	...	*0 6*	...			*4 58*
Dholka . .	0 2	0 3	...	0 10	0 54	4 0	16 85	6 37	6 82	1 58	0 1	0 7	36 39
						3 98	*0 8*	...	*0 58*	...			*4 64*
Dhandhuka . .	0 3	0 8	0 4	0 1	0 27	4 24	10 54	6 6	5 6	1 47	...	0 12	27 92
						3 16	*0 12*	*3 67*	*1 90*	...			*8 85*
Gogha . .	0 6	0 11	...	0 1	0 36	2 97	17 22	5 10	5 15	2 36	...	0 1	37 35
						4 64	*0 1*	*0 29*	*1 71*	...			*6 65*

Note.—The figures in italics represent the rainfall in the monsoon of 1899.

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APPENDIX D.

List of works executed by District and Táluka Local Boards and Municipalities in the Ahmedabad District.

District or Taluka Local Board.	District or Taluka Local Board—*continued*.
Daskroi.	*Gogha.*
1. Nandej.	1. Avania.
2. Jhundal.	2. Morchand.
3. Muthia.	3. Khambhu.
4. Kuha.	
Parántij.	Municipalities.
1. Kerol.	
2. Talod.	*Modása.*
Modása.	Road repairs.
1. Dhansura.	
2. Dehmai.	*Dholka.*
	Western Drainage Channel.
Dholka.	Malav Tank.
1. Jhekda.	Other excavation and repair works.
2. Ambareli.	
3. Bawla.	*Sánand.*
4. Khantalao.	Bhadrethi Tank.
5. Shiawada.	Other relief works.
6. Chikhli Tank.	
7. Gogha Tank.	
8. Gadhemar Tank.	*Gogha.*
9. Magia Tank.	Repairs to old wells, roads and tanks.
Sánand.	
1. Daduka.	*Viramgám.*
2. Juwal.	Gangasar Tank, and repairs to town wells.
3. Chonvadodra.	
Viramgám.	*Mandal.*
1. Chhaniar.	Digging tanks.
2. Daslana.	
3. Gunjala.	*Dhandhuka.*
4. Vithlapur.	Pirasar Tank.
Dhandhuka.	
1. Gogla.	*Dholera.*
2. Muli.	Village Tank.
3. Gamph.	
4. Sodhi.	

APPENDIX E.

Famine Commission's.		Bombay Government.	
Class.	Wage.	Class.	Wage.
1	2	3	4
Workers.	Chataks.	*Workers.*	Chataks.
Special	Uniform wage exceeding by a constant difference that allowed to Class I.	Special	Uniform wage exceeding by a constant difference that allowed to Class I.
I (Diggers)	20	I	19
II (Carriers)	15	II	15
III (Working children)	8	III Maximum	10
		III Minimum	7
Dependants and others.		*Dependants and others.*	
IV (Adults)	12	IV	12
V (Children.) Over 8 years.	7	V (children.) Over 8 years.	7
V (Children.) Under 8 years.	5	V (children.) Under 8 years.	5

G. I. C. P. O.—No. 86 R. & A.—18-5-19 01.—50.—J. G. F.

Mr. A. E. L. EMANUEL, I.C.S., ASSISTANT COLLECTOR, AHMEDABAD.

The President.—What were your functions in your district?

A.—I was in charge of two *taluqas*—Morasan and Prantij.

Q.—Was the crop failure in those two *taluqas* complete?

A.—I think so, except on the plots round the wells.

Q.—Did the well irrigation protect a large area or a small proportion?

A.—In Morasan very little indeed; but in Prantij a considerable amount.

Q.—Is Prantij mountainous?

A.—All flat except a little in the north.

Q.—Alluvial soil?

A.—Yes.

Q.—When you took charge of the two *taluqas* in October 1899, did you find relief works in operation?

A.—I think they were only test-works when I arrived; but very soon after that relief works were opened.

Q.—Conducted by the Public Works Department?

A.—Yes.

Q.—On what system was payment made?

A.—At first on the piece-work system.

Q.—While the piece-work continued did the people on the works seem to you to keep in good condition?

A.—No; in November or December on the work in Prantij many people were seen in bad condition.

Q.—Noticing that they were in a bad condition did you take any action?

A.—I wrote to the Collector and the Collector wrote that task work was to be introduced.

Q.—It did not occur to you to introduce kitchens on the works?

A.—They were introduced very shortly after the task work was introduced?

Q.—Did you notice that the introduction of the task work system improved the condition of the people?

A.—I did not.

Q.—Did you consider that the Public Works in your *taluqas* were under your control; that you could pass what orders seemed to you suitable and necessary?

A.—Not except on small points.

Q.—You did not interfere?

A.—I did interfere by suggestions.

Q.—Did the Public Works Department officials always act according to your suggestions?

A.—Generally; if not, I wrote to the Collector or occasionally to the Executive Engineer straight.

Q.—On the whole, they conducted the works fairly well?

A.—Yes; I think so.

Q.—Did they treat the people sympathetically?

A.—Yes; I think so.

Q.—You had control of the kitchens and hospitals?

A.—Not the hospitals.

Q.—Under whom was the hospital placed? Was the hospital under the Public Works officer or under the Medical Officer?

A.—It was under the Medical Officer.

Q.—Had you control over the kitchens and sanitary arrangements?

A.—I had control over the kitchens—general inspecting control.

Q.—There were the three authorities: there was the Public Works Department and there was the Medical Department and yourself, each having a separate sphere of action in connection with the work?

A.—That is how I understood the system.

Q.—If you saw anything wrong you would have made suggestions, and if your suggestion had not been accepted you would have written to the Collector. You do not think you had the power to interfere or pass any official orders for anything connected with the hospital? I only want to know what your own appreciation of your position was.

A.—I did pass orders to the subordinates and I hardly remember any case in which they were disobeyed; but I do not know how far I had the legal authority to pass orders.

Q.—You controlled the gratuitous relief in your two *taluqas?*

A.—Yes.

Q.—Up to May the numbers on your village relief were very small, they never exceeded 5,397 for the district, and then they fell again. Was there a contraction of gratuitous village relief in your two *taluqas* during February, March and April?

A.—There was a considerable contraction. Orders were received, I forget exactly what time, that as far as possible gratuitous relief was to be given in cooked food, and as far as possible the recipients of gratuitous relief were to be sent to the poorhouses.

Q.—Do you think you had sufficient Circle Inspectors, or would you have been better pleased to have more?

A.—I got as many as I wanted for Morasan, at any rate. There was one to every 12 villages.

Q.—What stamp of men? How did you recruit them?

A.—The first batch was from the Survey Department. Men who had been out of employ.

Q.—Were they literate; could they read and write?

A.—Yes.

Q.—Were they Gujratis?

A.—I think they were all Gujratis.

Q.—Were you compelled to employ any man who could not speak the Gujrati language?

A.—No.

Q.—Was there cholera on the works in your *taluqas?*

A.—Yes.

Q.—Had you anything to do with the arrangements made for suppressing it?

A.—Yes.

Q.—What action did you take?

A.—As soon as I heard that cholera had broken out on the works, I wired at once to the Collector asking him to sanction the removal of all the people on that work to another work.

Q.—You got the sanction?

A.—First of all he sanctioned the proposal, but then he recalled the sanction.

Q.—What was the reason?

A.—I believe the reason was there were difficulties in removing the people in a hurry.

Q.—Ultimately did the cholera disappear on the works or had you ultimately to break up the camps?

A.—There were two relief works going on, but neither of them was broken up and a third of the people died and a third left.

Q.—How many were on the camps?

A.—There were in two works about 6,000.

Q.—Did the 2,000 who disappeared, scatter amongst the villages or did they go to other works?

A.—To some extent they went from the badly affected works to less affected ones.

Q.—When the rains broke your figures on gratuitous relief rapidly sprang up and they also sprang up rapidly after the cholera outbreak. Did you bring people freely upon your village lists?

A.—Yes, I issued orders to bring people from the cholera camp on the lists immediately.

Q.—You did that on your own responsibility?

A.—I did that on my own responsibility, asking for sanction immediately afterwards.

Q.—The numbers continued high throughout the rains?

A.—I think so.

Q.—Did you put any of the cultivators on the gratuitous list?

A.—Not after the distribution of *takávi* and the charitable fund money.

Q.—When was that, in July?

A.—The end of July and the beginning of August.

Q.—Had you any village relief works at all in your *taluqas?*

A.—Yes.

Q.—You are in favour, from your experience, of having village works?

A.—Yes.

Q.—And you think that the scheme of village works could be managed with more benefit to the people and with less loss to the Government than the system of large relief works?

A.—I am not sure about the expense.

Q.—Of course, if you could manage village works through the village organization it would save the whole of the Public Works expenditure?

A.—If it could be done by village officers.

Q.—Would you have to employ the village officers? Could you not do it through the village headman or the respectable villagers, the *panchayets?*

A.—With good and numerous inspecting officers you could.

Q.—You think more could be done in future in that direction?

A.—I think so.

Q.—You say that your people showed an unwillingness to go to the large relief works. Do you think there was a sufficient number of large relief works in your two *taluqas* in the commencement?

A.—I thought they were sufficient then; but, on reconsideration, I think it would have been a great deal better if there had been more.

Q.—You state that the people evinced the greatest unwillingness to leave their homes; if you had the works nearer to their homes they would come?

A.—Many did come from their villages, but many would not.

Q.—What proportion of the mortality in your district may be attributed to foreigners?

A.—It is very difficult to say, because it is very difficult to identify. I should think half or one-third.

Q.—Did you in your experience find that there was great delay on the part of the railway in delivering fodder?

A.—I had no personal experience, but I heard that from the *mamlatdárs.*

Mr. Nicholson.—Of the persons who came on your works, those who came in good condition did not deteriorate?

A.—I think so.

Q.—Those who came in good condition to the works remained in good condition, but those who came in a bad condition could not recuperate?

A.—I suppose it was very difficult for them.

Mr. Bourdillon.—You say that women always were in excess of the male workers: did you hear a suggestion this morning that women were seen to do the task of a digger?

A.—I cannot recollect any case; but I may have.

Q.—It was not common enough to attract attention?

A.—No.

Q.—When you went about the villages did you see a large number of people in a deteriorated condition?

A.—Yes.

Rao Bahádur Syam Snnder Lal.—Did you find that admission to the works was easy for the new-comers?

A.—Absolutely, I think.

Q.—They did not have to wait for a day or two?

A.—I could not say.

Q.—Did any cases come to your notice that these new-comers had to sell their clothes before they could get admission?

A.—Do you mean in order to bribe?

Q.—Either to bribe or to please?

A.—I never heard of such a case.

Q.—Do you think that cholera had been raging for some days before it was brought to your notice?

A.—Not at first. I first got scent of it in South Morasan and very shortly afterwards it broke out in North Morasan.

Q.—With reference to the preponderance of females to males is there anything to show in the Ahmedabad district that the men migrate much and leave the district?

A.—I do not think so. I think they all stay at home.

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Mr. A. L. Emanuel, I.C.S.

Answers by Mr. A. L. Emanuel, I.C.S., to the questions drawn up by the Famine Commission.

11. (*a*) *Test works* started in August 1899.

(*b i*). *Kitchens on works* in December 1899 or January 1900.

(*c*) *Poor-houses* were opened in December 1899. A branch poor-house (Demai) was opened a little later.

(*c ii*) *Kitchens not on works* were opened in August 1900.

(*d*) Private *charity* was not organized by Government to any noticeable extent. At the commencement of the famine, considerable sums were collected, chiefly from Mahájans, under Government auspices in some of the towns of Sánand and Dholka Tálukas for cattle preservation funds.

Private charity was organized by private persons to a considerable extent at the beginning of the famine, in the form of cheap grain shops. Afterwards when poor-houses started, these were given up.

There were sporadic instances (as at Sonagav, a largish village of Prántij) of village funds collected by the rich men and devoted to various forms of relief—buying clothes, working cattle troughs, &c.

(*e*) Government *forests* under Revenue management exist in Modása Mahál. These produced no food or fodder after October 1899, when I arrived. I do not know if they had been thrown open before. The Government grass preserves in Sánand and Dholka were thrown open in August-September 1899.

14. Irrigation wells can be made with success in the central and greater part of Prántij Táluka. In Modása Mahál, except in a few favoured parts, such as the south bank of the Watrak, well digging is laborious and precarious owing to the quantity of rock in the soil. In Sánand and Dholka Tálukas, except in the east towards the Sábarmati, there is a constant risk of well-water and well-cultivated land going salt; otherwise wells for irrigation are constructible. The best sites for irrigation wells are generally the dry tanks, the soil being soft and rich and water close. The tanks were generally used in this way in 1899-1900 on the Commissioner's special easy terms; and in 1900-1901 the use of the dry tanks in Viramgám, Dhandhuka and Gogha was encouraged as far as possible. Loans for seed and for well furniture are generally necessary for 'kacha' well diggers. In parts of Viramgám *this* year the water was so low that a double-staged pulley was necessary.

Well-digging was encouraged by takávi throughout the famine. It was specially successful in mid-Prántij, where crops were raised from hundreds of wells, the water lying particularly near the surface (sometimes only 10 feet down). Unfortunately frost spoilt much of the crops thus saved from drought.

In Modása the water level was so low that only comparatively small patches could be cultivated even where wells were dug. A good deal of employment (as elsewhere) was given by loans for wells, but the whole Mahál was studded with useless dry shafts and the stones knocked out of them.

'Kacha' wells seldom outlast a monsoon, and in Prántij the constant complaint was of their filling up even soon after digging, the soil being sandy. Where it could be afforded, or wood could be found, the shaft was shored up with planks or branches. Every serviceable 'kacha' well made 'packa' was a distinct permanent improvement, but the opportunities offered for this work were not, I think, sufficiently taken advantage of by the cultivators. The impetus that *was* given to well building by the famine should be among the permanent benefits accomplished by the famine.

I should have mentioned that, especially in Modása, a certain number of wells lay idle through the death of the owner's bullocks.

15. The first works undertaken, *i.e.*, the test works, were village tank excavations under the Táluka Local Board (aided by the District Local Board) and under Municipalities (Sánand, Dholka). Supervision was by the Local Fund Overseer, and the Municipal Secretary, respectively.

16. Piece-work, not task work, was in force at the test works, the wage, as far as I remember, being successively 5, 6, 7 and 8 annas per 100 cubic feet.

The gangs were mixed, of males and females, and the rates did not differ for different classes of workers.

20. Last sentence.

At Kavla Tank, the first large relief work in Sánand and Dholka, there was at first and for some little time a deficiency of tools and baskets. At the first large relief works in Prántij and Modása (*viz.*, Luni and Vadágám stone-breaking camps) there was for some time a deficiency of suitable tools.

During the rains in Prántij and Modása, clothing apparently could not be readily brought up in sufficient quantities or was insufficiently ordered.

Beds and bed clothing were difficult to procure at nearly every hospital in sufficient quantities; and eating pots at many kitchens.

23. Free to all. No distance test was used, to my knowledge, but as the works were generally in pairs, at a day's journey or less from each other, people of villages very near one work would be

drafted to the other. In the case of works situated *at* a town or large village, however, the inhabitants were told to go to another work *before* admission.

Residence on the works was not made expressly compulsory, but it was practically compulsory under the above conditions. In some cases, however, workers, I believe, found it practicable to walk home daily, and a week-end home-going was a common thing.

After the rains broke out, workers were encouraged to live in the villages near, to be under good shelter, and the small Civil Agency Works and some others were opened expressly for neighbouring villages.

21. Not more than a population of 50,000, or an area of 15×15 (225 square) miles.

I don't remember any instance of British applicant going more than 20 miles for work, and very few went more than 15.

25 and 26. I can only speak of the officials who lived upon the relief works. Without papers, I cannot say now what the legal relations of the two branches were, but I think those nearly approached the practical result, *viz.*, that in nearly every matter authority was in the hands of the Public Works Officer in charge of the work, the Civil Officer being independent only in kitchen matters. The Civil Officer had charge of the admission of workers, of the supervision of shops and some smaller matters. The Civil Officer was responsible to his Civil superiors for everything that occurred on the work, as it was considered his duty to inform them, even where he could not himself effect a remedy. There was one Civil Officer for each relief work. He was oftenest substantively a 'taláti', or else a 'kárkún' in a táluka or head-quarter office. The Civil Officers, I remember, received from Rs. 35 to Rs. 60 per month.

28. Gangs generally numbered from 25 to 40. Labourers generally came on the works in families or village groups of 10 or so, and such groups were easily joined up into gangs of neighbours or villagers. I heard of no difficulties arising from heterogeneousness of gangs, though I came across no very heterogeneous gangs or even rather heterogeneous gangs.

30. Women always seemed to considerably outnumber the men among the workers, and in the absence of a preponderance of females in the tract, I can only think that the men lived in the villages to a larger extent, doing field work, or minding the cattle, or idling. If this is undesirable, a reduction of the female wage still further would seem to be called for, but as things were, I saw no disadvantages that I have not mentioned. I imagine the women worked fully as hard as the men and were often as strong. However, I think it would be unprofitable to level a woman's pay up to a man's, because her outturn of work as a rule is less.

32. At Luni quarry work I found, in December 1899, a large number of the workers deteriorating

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or not improving their bad condition, on piece-work. Task work was presently introduced all over the district, and conditions improved. Most of these workers had come on too late, and those who came on in good condition did not, I believe, deteriorate; so I cannot say whether piece-work, accepted in time, would keep the workers going throughout a famine. I am of opinion that it should give place to task work as soon as the workers show signs of deterioration, and in any case if they arrive deteriorated. One cannot assure workers, especially in backward parts, arriving in sufficiently good condition to be treated as ordinary labourers, and if a man is out of condition, his keep should be made the main consideration and his work a secondary consideration (task work). If, however, taught by previous famines, or through common sense, workers arrive in good condition, I see no reason why they should not be paid entirely by their output of work, with, perhaps, an upward limit, like labourers in good years.

34. Adequate; in view of the fact that so many workers throve on it, and in view of the dangers of over-payment. The high mortality on works, especially in Modása Mahál, however, points to the consideration that there should be special rates for lower class tribes like the Koli-Bhils, who have never been used to hard, constant, and regular work. A difference of task for each gang would, I think, be a good thing.

I heard of Pátidárs of and at Dhansura (where they were admitted against the rules), making Rs. 20 per family at the works in a few months, but I doubt if this was typical.

38. Payment weekly, but oftener in the first week.

For people like the Kolis, who cannot save, I should like to see more frequent payments, but the difficulties are very great. As it was, owing to the strain of paying the whole work even once a week, payment had often to go on through the night, and yet complaints of pay being several days in arrears were constant. With a large staff of cashiers, say one cashier per 500 workers, daily payments could doubtless be made.

39. New comers were given a feed in the kitchen if they wanted it, and fed in the kitchen till fit for work. Then if destitute they were twice paid every three or four days; then weekly.

40. The individual was paid. I think the head of the gang would be less trustworthy as a pay-master than the cashier, especially if, as was sometimes necessary, the head of the gang was a stranger to his gang.

59. I think the balance of argument is in favour of extending small village relief works. As the staying at home might be an inducement to persons with means to join them, they might be carried on in conjunction with large works and lowly paid in comparison (this was done in this Presidency after last rains).

The great objections to large works are, undoubtedly, the reluctance of villagers to quit their homes for them till they are unfitted for work, especilly if they have cattle (this was a very large factor indeed in keeping people back in my tálukas); and, secondly, the havoc an epidemic will cause on them owing largely to almost inevitable insanitary conditions.

In his own village, a villager has a roof to shelter him from both heat, cold, and rain (all heavy manslayers in the camps). He knows where to find fuel. He is with his own people, and he can protect his lost property.

In this famine the deserted houses of workers were frequently despoiled of every beam and tile by thieves, and this thought kept many from the works.

It is argued that the difficulty of supervising village works will be great. I do nct see that it will be more difficult than supervising a large work. The higher officials on the work will simply have to travel more. Peculation could not be greater in villages than it is on the big works, and in each village, it must be remembered, there is a customary organization which would be no mean help in managing the affairs of a work. Many would, of course, have to travel more, but I believe the 'Banias' would remain in their villages and food could be obtained by the people in their customary ways.

The greatest difficulty, no doubt, is that of limiting the number of applicants for work to those needing it; but even if caste restraints broke down (which would be slower in a man's own village), I think the lower payment of village works as against large works should counteract the tendency for the village to work *en masse*. Certain castes, which should be capable of internal mutual help, might even be penalized or refused.

It is true that it might be difficult to find work in each village, at any rate to last long, but it must be remembered that each village would only have a few workers, and it is astonishing how much there is to be done in nearly every village in the way of improving tanks, roads or bándhs. In Modása, when cholera sent the people home from the works, useful small improvements were effected in nearly every village in return for the dole.

Villagers could, if necessary, be turned on to private land improvements, or massed in a neighbouring village, and the larger works would always be ready in the last resort.

66. A Government Fodder Depôt of hay imported from Thána and the Central Provinces was opened at Talod Station on the Ahmedabad-Prántij line in the middle of the famine, and though long delayed, did much good, and was long expected and welcomed. A larger supply could have found a ready sale.

The cattle camp at Ahmedabad was too small or too far to serve Prántij and Modása much.

The deportation of cattle to Thána and Dharampur was unpopular except in some of the most enlightened villages. Unfortunately it was not a success.

70. Gratuitous relief was limited to the incapable or destitute, who were picked out (1) by the headman, who seldom took the responsibility, preferring to let a man starve, (2) by the village relief 'panch' selected at the beginning of the famine. These, too, were generally otiose, (3) by the 'taláti' who, on the whole, managed the list, (4) by the Circle Inspector, who generally started the list, and was, on the whole, in my experience, efficient, (5) by higher inspecting officers.

71. Poor-houses were opened at Prántij, Modása and Demai in December and January 1899-1900. They were filled almost completely by Koli-Bhils. The numbers at Modása at the beginning of the hot weather reached nearly 2,000, largely immigrants from the immediately adjoining Mahi Kántha States (I'dar and others).

78. At relief works and poor-houses at least one cook was a Bráhman, generally more, and sometimes all. In the village kitchens the same was the case, except that where the pauper population was all low castes, a Kanbi or lower caste cook was employed.

In the village kitchens opened in August, Bráhmans and Kanbis objected to taking their dole in the kitchen and were given raw grain.

79. Village kitchens were in charge of the headman or taláti, with in nearly every case a kárkun (occasionally two kárkuns in a big village) on Rs. 10 or 12. The kitchens were inspected by all the usual inspecting officers, beginning with the Circle Inspectors.

80. Cheap grain shops were opened by benevolent private persons or communities in most of the towns from the beginning of the famine till the opening of the poor-houses. All comers were, I believe, admitted, though at some places (as Modasa) there was a separate shop for Mahomedans.

I believe the managers used to forego about a fourth or third of their ordinary profits.

I remember no disadvantages connected with these establishments, which must have been of great utility, and must postpone the date when the comparatively degrading institution, the poor-house, is necessary. I have heard the objection that cheap grain shops only retard and obscure the inevitable necessity for regular Government forms of relief, but I cannot think that any opening of native purse-strings in aid of relief is unwelcome, and in the absence of an inquisition into every man's means, I do not think that charity thrown in with grain to any buyer is worse than charity given with wages to any worker.

87. The population of Modása Mahál is mainly composed of very ignorant Kolis and Bhils (in fact a mixture of the two races) of poor physique. Such people could not, I think, adapt themselves readily to the discipline of a relief work, being unused to serious labour. Many of them wilfully lingered in the villages to obtain the benefits of gratuitous relief, prefering starvation to work. Many would also prefer starvation or begging to enclosure in a poor-house. Modása is as much woodland as arable.

But the main reason for the large numbers on relief in Modása was undoubtedly immigration from Native States amongst which the villages of Modása are a mere string of islands. The starving inhabitants of these States simply poured into the works, into Modása bázár and any large village to beg, and if fed in our poor-houses they only returned when sent away to their own relief institutions. Some immigrants wandered regularly from work to work to obtain the benefits of 'new-comers'' rules. Immigrants came from as far as Pálanpur and Abu.

89. Most of the relief *workers* were Koli or Dhed labourers by profession, but there was also a considerable proportion of small Koli cultivators, and a very few Kanbis.

In the villages Kanbi recipients of dole, especially destitute women, were commoner. A good number of Mahomedan women received gratuitous relief at Modása and Harsol.

91. Credit absolutely ceased in the villages, and jewels were sold everywhere at a loss.

I don't think people were reluctant to exhaust their own resources before accepting State relief, except, of course, those humbugs in each village who wished for relief without deserving it. A few cattle were sometimes seen on the works, and a few other chattels, but clothes were old and scanty, jewels mainly poor or imitation, and even the best houses of cultivators and some Bąnias showed remakably bare interiors.

92. No. Without a distance test I see nothing to prevent well-to-do people adding to their incomes by relief work; but so far caste pride has been almost a complete preventive, and a modified distance test also was in use.

99. In Sánand and Dholka at the beginning of the famine the '*bid*' root, which grows in black clusters in the Nul salt lake was freely ground to flour and made into chapatties, sold in the bázárs, stored up, or given to cattle. It is used to some extent every year and does not appear to be unwholesome.

Mowra barries are an annual crop in Prántij and Modása, but this year were very scarce, like mangoes; so, though useful, they made very little impression on the famine.

People on the works used to cook into soup a a certain soft dark green leaf which they found on

the hedges. It was saltish and tasty, but cannot have been very wholesome, used as it was as almost a staple. Since the rains of 1900 wild grains called 'sawo,' 'thek' and 'wanki' have been picked off the ground in quantities and keep many people in good condition. They are, apparently, quite wholesome.

104. There were somewhat bitter complaints of the block of fodder trucks from Surat way on the B. B. &. C. I. Railway. There was apparently a deficiency of trucks and private orders were long in execution.

110. For village relief the headman was assisted by a 'panch' of two or three private persons. These men were useless, in my experience, for regulating the dole lists, but were of some value as witnesses and checks of the grain-giving itself.

Modása and Prántij poor-houses were under private superintendents—leading merchants of the town. The Prántij institution was a success, but the management of the Modása poor-house was marred by quarrels between the Mahálkari and the Superintendent. On the whole I should be against such private management, unless an exceptionally good man is obtainable, owing to its irresponsibility. Though salaries are saved, in a small place it is possible for a tradesman Superintendent to benefit considerably through the grain supply.

At Demai poor-house and at Prántij Bakaria Tank Relief Work persons called 'Honorary Superintendents' or 'Inspectors,' being local 'sávkárs' were employed to check the supply, cooking and distribution of grain, and they were very useful in keeping the paid officials and the grain-dealers up to the mark. They were generally more or less interested to see that their neighbours did not unduly profit by their contracts with Government, and I think that this is one of the most useful ways in which non-official agency can be employed.

A. L. EMANUEL,
Assistant Judge,
Ahmedabad.

KHAN BAHADUR D. N. NANAVATI, DISTRICT DEPUTY COLLECTOR, AHMEDABAD.

The President.—Of what *talugas* had you charge?

A.—I had charge of Dholka and Sanand.

Q.—Was the famine bad in those two *taluqas?*

A.—Not very bad.

Q.—Were those two *taluqas* better off than the others?

A.—I cannot say.

Q.—When did you see the real pinch come?

A.—I think the real pinch came about March or April.

Q.—By that time had you done much in the way of gratuitous relief?

A.—Yes, we commenced that in November.

Q.—How many had you in March on village dole?

A.—10,587 units.

Q.—How many villages had you in your two *taluqas?*

A.—210.

Q.—In 210 villages you had 319 people on the lists and at that time—that was in March the mortality was getting very high?

A.—There was not much increase in the dole.

Q.—Did you send any of these people from the village to the poorhouses?

A.—They are sent to the poorhouses and to the works.

Q.—How many poorhouses had you in your two *taluqas?*

A.—Two.

Q.—How many people had you in those two poorhouses on the last day of March?

A.—I have not got the figures.

Q.—Did your poorhouses contain so many as five or six hundred people?

A.—Sometimes they contained a thousand.

Q.—In whose charge were the poorhouses?

A.—In charge of the Superintendent.

Q.—Was there a hospital assistant attached to the poorhouses?

A.—Yes.

Q.—Were any medical arrangements made?

A.—Yes.

Q.—Was the assistance of native gentlemen enlisted for these poorhouses?

A.—Yes.

Q.—What establishment had you for a big poorhouse of 500 or 600?

A.—One Superintendent and two or three *karkuns* under him.

Q.—Yes, and what else?

A.—There was one hospital assistant.

Q.—Was the mortality great in the poorhouses?

A.—Yes, it rose in April.

Q.—Was it higher in the poorhouses than on the works?

A.—I should think so.

Q.—Were those people, who were sent from the villages to get cooked food, compelled to live in the poorhouses?

A.—They were.

Q.—I understand there were two methods of relief—one, the dole distribution in the village; to what class of people used you to give the dole in the village; and what class of people did you send to the poorhouses?

A.—Homeless, wanderers, and beggars going about the streets were sent to the poorhouses.

Q.—And other people who were not beggars?

A.—Yes, if they were unable to go to the works.

Q.—What class of people did you keep on the dole in the villages?

A.—Generally those who were unable to work.

Q.—Why were there so few people on gratuitous relief? Was it due to neglect on the part of the *telatis* in bringing people on relief? There must be some explanation for it. Are you not able to give any explanation?

A.—No.

Mr. Nicholson.—Are the lists on which the programme of relief is based sent through the Revenue officers?

A.—Yes.

Q.—Did you have a voice in selecting the programme of relief works?

A.—I was not consulted.

Q.—Is the programme prepared in consultation with yourself?

A.—They are prepared by the *mamlatdár* and sent through us to the Collector.

Q.—You have a voice in saying what works should be carried out and whether they are sufficient?

A.—Yes.

Q.—Is that done yearly ?

A.—Yes.

Q.—Is a list of candidates kept up ?

A.—It was as far as our Revenue Department is concerned.

Q.—Not for Public Works Department candidates ?

A.—No.

Q.—Would you be prepared to provide a tentative programme for small works, village by village ?

A.—Yes.

Q.—Are there sufficient works that could be done with advantage ?

A.—Yes.

Q.—Are you prepared to carry out such a programme ?

A.—Yes.

Q.—Is there sufficient establishment for it ?

A.—Yes.

Q.—What supervision would you provide ?

A.—I think the *mamlatdárs* are able to supervise such works with the aid of a few officers.

Q.—Do there exist in most of the villages a number of people who could be entrusted with the supervision of small village works, such as the excavation of tanks ?

A.—In some villages there are such men ; *pattidárs* could be entrusted with it.

Q.—Are there a number of old pensioned Revenue officers and Government servants ?

A.—Yes, in several villages.

Q.—And they could also be entrusted with the various duties of private charity ?

A.—Yes.

Q.—I notice you consider that there was great mortality among the cattle ; do you mean that 80 per cent. of the cattle have been lost ?

A.—Yes, in the whole district.

Q.—What was the *kharíf* area of 1900 ?

A.—I have not got the figures.

Q.—Can you say whether it was equal to the normal or whether it was below the normal ?

A.—Rather below the normal.

Q.—What is your ground for saying that ?

A.—I once calculated it and it came to about 60 per cent. ; that was calculated on figures supplied by the Circle Inspectors.

Q.—For your own *taluqas* or for the whole of the district ?

A.—For my own *taluqas*.

Q.—You don't mean 60 per cent. of the whole but 60 per cent. of the normal *kharíf* area ?

A.—Yes.

Q.—You are engaged in making enquiries about remissions ?

A.—Yes.

Q.—Are these upon a set of rules ?

A.—Yes.

Q.—Am I to understand from your written evidence that the value of the *kharíf* harvest of each individual is to be calculated, and from that various deductions are to be made, and then it is to be ascertained whether the man has enough in hand to pay the revenue for the previous year ?

A.—Yes.

Q.—And the remission for 1899-1900 depends upon the calculation of the outturn of the *rabí* harvest after making certain deductions supposed to be sufficient for the *rayat's* subsistence and payment of land revenue of the current year ?

A.—Yes.

Q.—And if there is no margin left he is to get a remission for the previous year ?

A.—Yes.

Q.—Is that possible in the case of 50,000 people ?

A.—It is very difficult.

Q.—Out of the registered occupants in your *taluqa* how many people were made to pay during the famine year ?

A.—I cannot remember.

Q.—Would all these persons be *banias ?*

A.—Yes, generally.

Q.—There are large quantities of land in the hands of *banias ?*

A.—Yes.

Q.—Was the fact of the land being in the hands of *banias* made a determining factor as to whether the man should or should not pay ?

A.—Yes, it was.

Mr. Bourdillon.—You have travelled a good deal I suppose over the relief works ?

A.—Yes.

Q.—Did you notice women working as diggers ?

A.—No.

Q.—There was always in your opinion a sufficient proportion of male diggers ?

A.—Yes.

Q.—And would the proportion of women to men be about 2 to 1, roughly speaking ?

A.—Yes, I think so.

Rai Bahâdur Syam Sunder Lal.—Are there any plots in the villages not under cultivation which could be used for village grazing or for the storage of village fodder ?

A.—Yes.

Q.—Would it be advisable to preserve them in that way ?

A.—Yes.

Q.—Have you ever thought about this ?

A.—No, I have not.

Q.—Did you relieve *parda-nashin* women out of the Indian Famine Charitable Relief Fund ?

A.—No, out of Government money.

Q.—Did you get an allotment from the Indian Famine Charitable Relief Fund ?

A.—Yes.

Q.—How was it spent ?

A.—In giving subsistence to poor cultivators who were not entitled to relief under the Code.

Q.—And artizans ?

A.—I don't think there was any relief given to artizans.

Q.—Was it not needed ?

A.—No, the artizans were pretty well off.

Q.—Were there any artizans on relief works?

A.—I cannot say.

Q.—What employment did they find ?

A.—I think they had means of their own.

Q.—Were these means not exhausted by the end of the famine ?

A.—I think they might have been pinched but they didn't starve.

Q.—Had they sufficient to make a fresh start in their own line at the end of the famine ?

A.—I think so.

Q.—In your *taluqas* do you think the sub-soil assessment has had anything to do with the throwing of land out of cultivation ?

A.—No.

Q.—Has there been any steady reduction in the cultivated area from year to year during the last 5 years in your *taluqa ?*

A.—Not much.

Q.—What is the amount of relinquishment ?

A.—In 1897-98 about 1,427, in 1898-99—706, and in 1899-1900—1,000 acres.

Q.—Out of a total area of what ?

A.—127,000 acres.

Q.—When were poorhouses begun ?

A.—In November or December.

Q.—And your village doles ?

A.—At the same time.

Q.—There was then no arrangement for giving relief to people who came under the category of section 57 ; for the lame and the blind ?

A.—I think they were maintained by the villagers.

Q.—In all cases ?

A.—I think so.

Q.—Private charity was sufficient ?

A.—Yes, up to November and December.

Q.—Was any list made beforehand of the people to be put on the dole ?

A.—Not before November.

Q.—You did not presume there was any necessity for making out these lists before November ?

A.—I think we commenced these operations about September or October.

Q.—The doles were not given till when ?

A.—November : the number was very small in November, it was confined to village servants.

The President.—Is there much indebtedness in your two *taluqas ?*

A.—I think there is.

Q.—What proportion of the cultivators are indebted ?

A.—At least $\frac{1}{4}$ or $\frac{1}{5}$.

Q.—Are they hopelessly indebted ?

A.—Yes.

Q.—And the remaining $\frac{3}{4}$ or $\frac{4}{5}$ may hope with good seasons to recover themselves ?

A.—Yes.

Q.—As regards the $\frac{3}{4}$ or $\frac{4}{5}$ how many times the Government revenue are they indebted ?

A.—I cannot say.

Q.—Have you made enquiries ?

A.—No, not about this.

Q.—How many times the Government revenue must a man owe to be hopelessly indebted ?

A.—About ten or fifteen times.

Q.—If he owed anything under ten times the revenue would he be able to recover with good years?

A.—Yes.

Q.—Is there a considerable proportion of your people entirely free from debt?

A.—Not many.

Q.—Are 35 per cent. of the people free from debt?

A.—Yes.

Q.—And 20 per cent. are hopelessly indebted?

A.—Yes.

Q.—And the balance 45 per cent. are more or less indebted?

A.—Yes.

Q.—Take the case of a tenant who is not indebted to any particular degree, does he save from one year to the other to pay the Government assessment in a bad year?

A.—I don't think he saves much.

Q.—He lives from hand to mouth?

A.—Yes.

Q.—Does he find it difficult to pay the Government assessment in good years as well a bad years?

A.—In bad years he does.

Q.—Is he forced to go into debt for the purpose of paying?

A.—Yes.

Q.—Would it be a general help to that class of people if there was a system of suspension of the demand in these bad years, say, that a man's crop had substantially failed and instead of asking for the full demand you asked for 8 annas or 10 annas and took the remainder and spread it over two or three years?

A.—Yes, I think it would be of great assistance to the people.

Q.—Would you at the beginning of such a failure of the crops, as you have had, first suspend and then remit, or would you remit in the first instance?

A.—I would remit in the first instance.

Q.—What degree of crop failure would justify remission?

A.—Anything less than 4 annas.

Q.—Would you in such a case have any regard to the person, *viz.*, whether he was a money-lender or merely whether he was a cultivator, would you remit straight off in the case of *banias* as well as of ordinary cultivators?

A.—Only in the case of ordinary cultivators.

Q.—You would not remit in the case of money-lenders?

A.—No.

Q.—How will you distinguish between the money-lender and the ordinary cultivator?

A.—I think you can make a guess.

Q.—You want something more than a guess, you want to work on the basis of facts. If the *bania* proved to be the actual proprietor of the holding and if the cultivator's name was registered would you advocate bringing the *bania's* name on the register as the owner, and the removal of the cultivator's name to that of sub-tenant?

A.—Yes.

Q.—In that case do you think it would be desirable to have any system of rent law to regulate the dealings of the *bania* and the sub-tenant?

A.—Yes, I think it is necessary.

Q.—And enhancements of rent would be restricted?

A.—Yes.

Q.—We have been told that the money received by the *bania* is not so much rent as interest on the money which he has lent, how would you regulate such a case, if the *bania's* name were brought on the register as the owner, would you take that registration as a complete clearing of all the debts and the establishment of a new state of things?

A.—Yes.

Q.—When you brought the *bania's* name on the register as proprietor would that fact of registration be the termination of the position of debtor and creditor between the *bania* and sub-tenant?

A.—Yes.

Q.—It would be in the conditions of a foreclosure?

A.—Yes.

Q.—And the debt would be wiped off?

A.—Yes.

Q.—Would you give the sub-tenant the right to hold on at a fair and equitable rent?

A.—Yes.

Kha'n Ba'ha'dur D. N. Nanavati.

Answers by Khán Báhádur Dadabhai Nasarwanji Nanavati, District Deputy Collector, Ahmedabad, to the questions drawn up by the Famine Commission.

1. The outlook in the district when the rains of 1899 commenced was decidedly hopeful. The rainfall in June was 4 inches 33 cents, having been almost up to the average, 5 inches 6 cents. In June of 1898 the rainfall was abnormally high, 7 inches 14 cents. After June 1899 the rainfall became altogether insignificant and in many parts of Ahmedabad it ceased almost entirely. In August 1899 there was a heavy local shower in Dhandhuka, giving a total of 3 inches 82 cents, but in the other tálukas there was practically no rain. In the first two weeks of September there were between 1 and 6 inches of rain in Daskroi, Dhandhuka and Gogha, 2ut in the other tálukas there were a few cents, from 5 to 67 in that month. The rain ceased after the middle of September 1899. The total fall was very deficient throughout the district. The kharif crops withered, agricultural operations ceased, fodder became scanty, cattle died in numbers, and prices rose rapidly.

The harvest during 1897-98 was fairly good. The early rains failed more or less throughout the greater part of the district and the result was that the rice crop was below the average. The later rains were however sufficient and benefited other crops, especially cotton, wheat and barley, which were very good almost everywhere. The supply of fodder was also much improved.

The harvest in 1898-99 was favourable. The rainfall was fairly well distributed, and, except for cotton cultivation, was timely.

2. The kharif sowings were not up to normal, the area sown having been 200,000 acres in round figures against the normal cultivated area of 600,000 acres in round figures. The percentage sown thus comes to nearly 33.

The normal cultivated area has been obtained as under.

During 1898-99 the total area under kharif and rabi was		... 819,162
During 1896-97	do.	... 789,779
During 1895-96	do.	... 840,379
During 1894-95	do.	...1,028,142
		4 | 3,477,462
		869,363

The area under rabi is on an average 250,000, leaving about 600,000 under kharif.

3*a*, *b*, *c*, *d*. The average rainfall is 33 inches and the actual rainfall in 1899 was 6 inches 25 cents, including 46 cents in May or 19 per cent. of the

average. The rains ceased altogether after the middle of September. The distribution of rainfall from June to September, compared with the average, was as under.

June.		July.		August.		September.	
Average.	1899.	Average.	1899.	Average.	1899.	Average.	1899.
5 6	4 33	12 11	0 19	7 41	0 47	4 61	0 80

4. The average normal harvest on a normal cultivated area is about 5,200,000 Indian maunds, while the kharif harvest of 1899 was almost *nil*, it amounting to about 2,500 Indian maunds only. No percentage is therefore possible.

5. The population of the district is 922,000 and the number of agriculturists is about 450,000, including petty cultivators and labourers, or nearly one-half of the population *or* 50 per cent. Of these 450,000 agriculturists, about 150,000 are Kunbis, 60,000 Rajputs, 8,000 Sathavaras, 4,000 Kachhias, 3,000 Mális, 225,000 Kolis.=35 per cent. labourers and 15 per cent. petty cultivators.

Preliminary Action.

6. It has already been noticed above that the kharif harvest almost entirely failed and that the prices of food-grains rose rapidly, amounting in the case of jowári and bajri, the staple food of the poor, to about double the normal. This rise in prices and the want of field employment owing to the failure of the kharif crops told heavily on the depressed classes and the poorer cultivators, who, feeling the pinch early in August 1899, began to commit robberies, dacoities, and other serious crimes, to prevent which excavation of tanks was undertaken as test works at the expense of the Local Funds about the middle of August at the centres thickly populated by the Kolis and other turbulent tribes, large numbers of whom at once flocked on the works from a distance of eight to ten miles. As regards payment to workers *vide*, please, answer to Question No. 16.

7. A sufficient demand for work at famine wages having become apparent, private charity having almost entirely ceased and an increasing number of famine-stricken immigrants from the neighbouring States having been found wandering about all over the district, relief works were opened, the strain on which became more and more enormous every day.

8. Excavation of tanks as test works was first undertaken at the following places at the expense of the Local Funds and the Municipalities:—

Tálukas.	Names of Works.
Daskroi ...	... Muthia and Nendej.
Dholka ...	... Dholka and Bávla.
Dhandhuka ...	... Dhandhuka, Gogha, Mudi and Sodhi.
Viramgam ...	... Viramgam, Chhanier and Vithlapur.
Prántij ...	... Talod and Kherol.
Sanand ...	... Sanand, Juval and Daduka.

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The severity of the distress having been found sufficient to warrant the opening of regular relief works (*vide*, please, answers Nos. 6 and 7 above) regular relief works were opened from time to time as circumstances required.

9. Lists of relief works were ready with surveys and estimates and a list of candidates for famine service was also ready.

A complete answer to this question will, it is presumed, be given by the officers of the Public Works Department.

10. In due consistence with the declared policy of the Government of India, large and useful public works formed the backbone of the system of relief, but there was no programme of village works ready in reserve from the beginning. Excavation of tanks in different localities was undertaken as small village works in July last to provide work for those who left the regular works on account of cholera and also to attract cultivators home so as to be able to attend to their cultivation and look after their remnant of cattle.

11. Private charity was organized about the end of July and beginning of August, but it proved inadequate owing to the increasing number of starving immigrants from neighbouring States, and test works were then opened to gauge the distress. Kitchens on works were first opened in October 1899 and the system expanded gradually with the opening of regular relief works in the different tálukas. Poorhouses were opened at the end of November 1899 and in some places in December 1899. Kitchens in villages were opened in August and September 1900. There are no forests in Ahmedabad except in Modása, which, however, were not thrown open for grazing purposes, there having been no grass in them.

12. So early as the beginning of September 1899, orders were issued to the Sub-Divisional Officers, Mámlatdárs and village officers, desiring that care should be taken to see that no one died of starvation. Those able to work were persuaded to go to the relief works and the weak and the infirm were fed at the expense of Government. Private charity, which was considered exceptionally liberal and abundant in this district, was encouraged as much as possible by the Mámlatdárs and Sub-Divisional Officers, and it really did all that it could, under the exceptional circumstances of the season, to relieve the distress of people and cattle. This relief was afforded by the Mahájans themselves. All the officers from the Collector downwards were on the alert, and they faithfully carried out the above orders by briskly moving about their charge, looking into things for themselves, enquiring into the condition of the people, and putting people on village dole or sending them to the works as circumstances required. The village dole commenced in November 1899. To provide against the danger of fodder famine, which seriously threatened the district, cultivators were encouraged to put every available acre of land wherever possible under fodder crops,

water from Government wells, rivers, &c., being put at the disposal of the cultivators free of charge. The number of Circle Inspectors was also increased in November 1899 to nearly three times the former number and the Mámlatdar's establishment was also increased at the same time to free that officer from his routine work and to enable him to move about more actively in his charge to supervise the village relief. The Mámlatdárs were called upon to submit their diaries weekly for inspection by the Commissioner. Special European Relief Officers were also appointed in April 1900 at a later stage to supervise the working of the poor-house, the village dole and the relief workers, and to see that no wanderers on the road died of starvation. A rough ambulance system was established in April 1900 at every poor-house and kitchen and at every town or village where there was no poor-house or relief work, and where famished vagrants were likely to be found. At all these places as many stretchers were kept as were needed and in the villages the Patels had the fields surrounding the villages searched every day to see that no wayfarer died of starvation. During the rains of 1900, the services of the Customs and Abkári Inspectors were also utilized in supervising the village dole and enquiring into the condition of the people.

13. Loans commenced to be given in September 1899, but I am unable to give figures for the whole district as they are not obtainable in my office. The limit of one-sixth of the land revenue fixed by the Government of Bombay in their Memorandum No. 124—Famine, dated 2nd October 1899, could not, however, be adhered to. The advances were made mostly to Kolis and a few poor Kunbi cultivators under the usual condition as prescribed in the rules for *kos, varat* (buckets and ropes), seed and wells, the Pátidárs and other well-to-do cultivators remaining aloof at first, though subsequently, *i.e.*, in July last, they too availed themselves of the concession. The loan granted at the outset was recoverable in whole.

14. Irrigation wells can be made in some tálukas but not in others, as in the latter the water is salt and brackish. Well water is used for irrigation to some extent, but it becomes salt in time in several places. Several wells which contained sweet water before have actually become salt and the land under them has remained waste. The average depth below the surface of water on the cessation of the rains of 1899 was from 8 to 10 feet in the morning, but by evening it sunk to about three feet or so. The digging of wells was much encouraged by the grant of loans and it contributed to a certain extent in securing sundhia jowári which, however, had not much grain in it. The loans were generally small and were used in digging kacha wells or repairing old ones, so as to be of immediate use. Not many pakka wells were dug. Loans were, however, subsequently granted to make kacha wells pakka where sweet water was permanently obtainable and so far as funds permitted. Such pakka wells cannot be more than 200 in the district. The wells whether kacha or pakka gave

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temporary employment to a certain extent, each well requiring on an average 10 or 12 labourers for their construction.

15. Excavation of tanks as mentioned in answer No. 8. They were ordinary works under Local Boards, the money having been made available from the District Board. Within Municipal limits the expenses were defrayed by the Municipalities. In the former case the works were conducted under the supervision of the Táluka Local Board Overseer and Mámlatdárs, and in the latter under the supervision of the Municipal Secretary and the Mámlatdárs.

16. Fair task was exacted at first from diggers and carriers who were paid at the rate of 1 anna 10 pies and 1 anna 8 pies on the completion of the work allotted to each gang. Able-bodied male labourers were paid at the former rate and the female labourers at the latter rate, the prevailing rate of bájri being 23 lbs. per rupee. Female labourers were exclusively employed as carriers and male labourers, whatever their previous occupation, were generally employed as diggers, and sometimes as carriers also when occasion required, *i.e.*, when the number of female carriers was insufficient.

17. Payment was not made in strict proportion to results. The wages fixed were in accordance with the Famine Code, page 58, Appendix 5. It was not considered necessary to take into consideration the case of infirm or weekly labourers, male or female or children, as it was thought unlikely that any such would come at the time to such works. The maximum wage fixed for males and females was therefore given. No classification of labourers was made, and no rest-day allowance or allowance to dependants was paid.

18. *Vide*, please, answers Nos. 6, 7, and 8.

Large Public Works.

19. Large public works, Panar Dediasan drain, South Daskroi drainage and irrigation and widening of Doig's Ditch, were first started after the middle of September 1899.

20. These works were under the control of the Public Works Department.

Note.—The rest of this question can be best answered by the officers of the Public Works Department.

21 to 25. These questions can be more precisely answered by the officers of the Public Works Department.

26. A Civil Officer was appointed for each charge. At first officers of the position of aval-kárkúns were appointed on Rs. 45 and Rs. 60. Their position with reference to the representatives of the Public Works Department was somewhat anomalous, as the one tried to assert his superiority over the other. Civil Officers were subsequently appointed on Rs. 30 to Rs. 45 from the class of talátis and kárkúns, and were subordinated by an order of Government to the

officers of the Public Works Department, the result being that defects, omissions, irregularities, &c., on the part of the Public Works Department were seldom brought to notice. The Civil officers were much inferior in position to the officers of the Public Works Department, and it was too much to expect them to expose the mistakes, &c., of higher officers of whom they were constantly afraid. No authority that I am aware of was ever given to the Civil officers to assure themselves that measurements were punctually and correctly made, but measurements were made by Civil officers on the workers' complaints of short payments having been made to them. The special duties prescribed at the end of paragraph 426 of the Famine Commission Report of 1898 were performed by the Civil officers, except that they did not calculate and pay the wages, though they were present when the wages were paid.

27. It did not rest with the Civil officer to decide which of the prescribed tasks was applicable.

28. Each gang consisted of 50 persons including men, women and children. These were generally members of the same family, but other people of the same village or adjoining villages were added if the number of 50 could not be made up by one family or people from the same village.

29 to 37. Answers to these questions can best be given by the officers of the Public Works Department.

38. Payment was made weekly and no modification in that system seems necessary, as advances were given to new-comers who were not therefore inconvenienced.

39. New-comers were paid one anna daily until pay day and no necessity therefore existed for their incurring the debt of the Bania.

40. Payment was made to each individual separately and this method is most preferable.

41 to 48. These answers can best be given by the officers of the Public Works Department.

49. Small village works—excavation of tanks—were opened about the end of May to provide work for labourers who had left the regular relief works on account of the outbreak of cholera and also to enable cultivators to attend to their cultivation work in their villages at the beginning of the monsoon. Those in absolute need of the work resorted to the works so started and others remained in their villages to attend to their cattle and cultivation. The transfer was not, in my opinion, an unqualified success, as those who did not return from the regular relief works on account of cholera preferred to remain where they were and were not attracted in any large numbers to these small works, however close to their villages. This may probably be due to the rigidity of the limit to the amounts earned, which were as under:—

		As.	pies.
Class I	... ...	1	9
Class II	... ...	1	6
Class III	... ...	1	0

Sunday wages and cash allowances to dependants were not given.

50. The small village works played but a minor part in the scheme of relief. These works were opened at a later stage and under the circumstances above stated.

51. Tank excavations.

52. These small works were under the direct management and supervision of the civil agency, but in the Viramgám and Dhandhuka Tálukas, where there are numerous Tálukdári villages, the works which were specially opened for the employment of poor Tálukdárs were supervised by a committee of principal Tálukdárs in whose presence payments were made by Kárkúns of the Tálukdári Settlement Department, the works being measured by the Local Fund Overseers, and estimates also being made by them. The Mámlatdárs and Divisional officers supervised all these small works.

53. *Vide*, please, answer No. 52.

54. The committee was not responsible administratively or financially. *Vide*, please, answers 52 and 53 above.

55. The works were carried on on the piece work system, and the scale of wages was that given in answer No. 49. The works were opened to all classes except those specially opened for the poor Tálukdárs in the Viramgám and Dhandhuka Tálukas. *Vide*, please, answer No. 53.

56. No system of selection of applicants for relief was tried.

57. Small works were not generally started within a distance of 5 miles from large public works. The wages on the small works were not so liberal as to attract any large number of labourers from big public works. An insignificant number did resort to small works from the larger ones so as to be as near their villages as possible, but there was no transfer of labourers from the smaller works to the larger ones.

58. *Vide*, please, answer 115.

59. No aboriginal tribes in the Ahmedabad District.

60. No forest and fodder works in the district. *Vide*, please, answer No. 11.

61. No.

62. No.

63. Artisans did not go to any relief work, being physically unfit for ordinary labour.

64. *Vide*, please, answer No. 62.

65. Precautions against the mortality of cattle were taken so early as the beginning of August 1899 by persuading the Mahájans of the leading táluka towns and villages to raise funds to be spent in saving cattle from starvation. The preservation of young and healthy cattle was aimed at. People were also persuaded to grow fodder crops from Government

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wells, rivers and other sources of water-supply without any extra charge. Cattle relief camps were opened at Ahmedabad by the Commissioner himself and others, and the Mahájans were also persuaded to receive cattle at different places for preservation. Some of the cattle were sent for grazing to the forests at Thána and Dharampor. Grass depôts were established at different places in this district where grass was brought from Central Provinces, Thána, West Khándesh, &c., for sale at reduced rates to *bona fide* cultivators and to others on special terms. Grass was also imported by private enterprise from forest tracts, &c. About 40 per cent. of the plough cattle and about 20 per cent. of the total number of cattle were saved by means of these agencies, the milch cattle having been almost totally swept away. A much larger percentage would have been saved had the railway authorities been prompt in booking the grass.

66. Grass was imported from the places mentioned in answer No. 65 above in pressed bales, several of which however contained heavy stones, inserted evidently by contractors to increase the weight of the bales.

Gratuitous Relief.

67. (*a*) On large public works children of workers under 8 years old, all adult incapable dependants of the workers, orphans, and all incapable or sick persons who came to the works were fed in kitchens. Except that for about 2 months in January and February 1900 the children of workers under 8 years old were given a grain allowance, raw grain was substituted for cooked food to dependants during the rains. If there was a poor-house within a distance of 10 miles such incapable or sick persons and orphans were sent as soon as the number reached a cart-load to such poor-house. The grain allowance was distributed separately on each section of the work.

(*b*) There were no kitchens attached to small works. These small works were opened about the end of May 1900, about a month after which village kitchens were also established where dependants, &c., were relieved.

68. The village dole was the most recognized form of gratuitous relief employed in the district, as uncooked grain, which was most acceptable to all classes, especially to the higher classes who had religious, social and other scruples to go to the poor-house, was given under that form of relief. The weak and the infirm could not also leave their villages and go to the poor-house to seek relief.

69. Not having the report of the Famine Commission of 1880 with me in the District I am unable to reply to this question.

70. Poor-houses were opened at the end of November 1899, when there were 8 in all, but the number rose to 13, the highest number in February, March and April 1900. Kolis, Vagris and Bajanias most

frequented the poor-houses. The largest number was 10,694 in April 1900.

71. Poor-houses were used as depôts for vagrants and immigrants, many of whom were from the native States of Pálanpur, Rádhanpur, Kadi (Gaikwadi), Cambay, Rewa Kántha and Mahi Kántha. I am not aware of any person who refused to work on relief work having been sent to the poor-house as a punishment.

72. Measures were taken almost every day to send people either to their homes where work was obtainable or to the relief works.

73. Kitchens were opened in July and August 1900, but I am not quite sure about the exact number. Kitchens served people living within a convenient distance, *i.e.* of 2 miles or so.

74. The ration was—

	Adults.	Children between 8 and 12 years.	Children under 8 years.
	Oz.	Oz.	Oz.
Grain	15	9	7
Dal	2	1	1
Salt...	½	⅛	⅛
Oil	½	¼	¼
Condiments and Vegetables	½	¼	¼

Khichari was given in the morning at about 10 A.M., and bread and dal at 5 P.M. People took their meals generally on the premises, but in cases where there was not sufficient accommodation food was also allowed to be taken away. Special diet, Mellin's food and Swiss milk was given in cases of sickness or weakness.

75. No limit of distance from relief works was fixed. In some cases kitchens were opened within a distance of 2 or 3 miles of relief works, *e.g.*, kitchen at Dhansura (Modasa) established within two miles of the relief work at Butal, kitchen at Bhensawada (Modasa) within 2 miles of the relief work at Rahiol.

76. No restriction was imposed. The kitchens admitted those who were already on the dole in the village where it was established, and those on the village dole within a distance of 2 miles or so. Dependants of cultivators who received charity money to carry on their cultivation were also fed in the kitchens or put on village dole if unable to assist in cultivation.

77. The poor-house ration was—

	Adults.	Children between 8 and 12 years.	Children under 8 years.
	Oz.	Oz.	Oz.
Grain	15	9	7
Dal	2	1	1
Salt	½	⅛	⅛
Oil	½	¼	¼
Condiments and Vegetables	½	¼	¼

The grain was rice, mug, jowari, maize and wheat. The ration was varied in case of sickness or weak-

ness in accordance with the advice of the medical officer in charge of the poor-house, Mellin's food and Swiss milk also having been used when occasion required.

78. Patels, Talatis and Circle Inspectors drew up the gratuitous relief lists with the assistance of the Mámlatdárs and the Sub-Divisional officers. The check was exercised by the Circle Inspectors, Mámlatdárs, Special Relief officers, Sub-Divisional officers, Collector, and in the rains by the Salt and A'bkári Inspectors and extra Aval Kárkuns. The Circle Inspectors checked these lists once in 8 or 10 days and other officers once a fortnight or month, or a longer interval as time permitted.

79. Payment was made in grain daily at the Banias' shops in the presence of the Patels, Talátis and village committees.

To pardanishin Girasia women and respectable Mahomedan women, flour, at the rate of one lb. each per diem, was given every week either at their homes or at the Municipal office according to the convenience of the recipients. No work was generally exacted from them in return.

81. Generally Brahmins were employed as cooks, but in some cases Kolis, Kunbis, Bharvads, Bhois, and Malis were also occasionally employed in Gogha, Modasa and Viramgam when the number of inmates in the poor-houses and kitchens was very large and Brahmin cooks could not be obtained on the wages fixed. To such of the inmates who objected to take the food cooked by others than Brahmins or by men of their own castes, uncooked grain was given to be cooked by themselves. Generally Brahmins and Kunbis took the above objection especially in the beginning when they had any means of their own to fall back upon, but such scruples were set aside at a later stage when the pinch began to be felt more keenly, and no complaints were heard.

82. In some cases outsiders were appointed superintendents with one or two kárkuns under each according to requirements, in others Talátis were made to superintend the kitchens in addition to their own duties, with the assistance of one or two Kárkuns. Circle Inspectors, Mámlatdárs, Sub-Divisional Officers, Special Officers and Salt Inspectors examined the accounts, added and struck off persons from the kitchen lists as circumstances required, examined the grain and cooked food, saw that each inmate received his proper quantity of food, looked to the cleanliness of the place, distributed clothes, and gave special diet where necessary.

83. Cheap grain shops were opened in several big villages and towns at the first stage of the famine, not at the expense of Government but from private funds, for the sale of grain at cheaper rates to poor Mahomedans, Kolis, Bharvads, Rabaris, and other low caste people. Such sales took place in the presence of a member of the Panch, who satisfied himself of the state of the recipient, and not more than a maund was given at a time.

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Suspensions and Remissions of Land Revenue.

85. Collections up to June last amounted to about 20 per cent. and at most 5 per cent. more may be expected to be recovered from well-to-do non-agriculturists, leaving 75 per cent. for eventual suspensions. Remissions have not been given up to now, but will be so after the prospects of the rabi harvest are known. They are to be granted after the ascertainment of the probable outturn from the area cropped coupled with anna valuation and allowance for subsistence for all who live on the land until the next harvest, plus payment of land revenue for 1900-1901, plus payment of tagai instalments due for 1900-1901. If there is no margin left after the above allowances and payments are made the amount is to be remitted. In cases in which *bona fide* cultivators relinquish up to 31st March 1901 any portion of their holding, being a whole survey number and unsown, the revenue for 1900-1901 is not to be levied and a remission for past years is to be given. The grant of remissions depends mainly on the correct record of cultivated areas, for which statements are being prepared. In cases in which the revenue for 1900-1901 can be paid, but not instalments of tagai, the latter is to be postponed and revenue for past years remitted. The above remarks about remissions apply to *bona fide* cultivators who have not the means to pay and have consequently been allowed suspensions.

86. Suspensions are based on the failure of crops, and the incapacity to pay was determined by the Talátis, Circle Inspectors and the Táluka Officers from personal inquiries. Non-agriculturists who had the means to pay, such as Banias and holders of alienated land, have not been granted suspensions.

87. Orders for inquiring into the capacity or otherwise to pay revenue were given at the end of December 1899, but final orders for the suspensions of revenue were given after the collection of revenue began. No remissions have yet been granted, *vide* answer No. 85 above.

88. No zemindari tracts.

89. No such fact was discovered.

General.

90. The number of persons in receipt of relief in April and the beginning of May 1900 was highest, it having been about 177,000. The total population of the district is 922,000. This high percentage is due to the failure of crops, high mortality among cattle, and the exhaustion of the resources at the end of the season when the pinch was most acute.

91. Relief was neither excessive nor defective, except in June 1900, when, owing to the dispersion of the people by cholera, all persons found in danger of starvation, whether able-bodied or not, were put on the dole list. All who were too weak to work and others who had to take care of their cattle or to begin cultivating their land were admitted to dole in the villages. The dole lists thus swelled for a

time, but it was absolutely necessary to accord this generous treatment to prevent high mortality.

92. The people belonged generally to the Koli, Vaghri, Bharvad, Marwari, Bajama, Dhed, Mahomedan, Rajput and Kunbi castes. They included poorer Thákors, occupancy and other tenants, but I cannot give an exact percentage.

93. There was no famine formerly in the Ahmedabad District.

94. Private credit ceased at the very first cessation of rain and indication of famine. The people exhausted their own resources by selling their ornaments, cooking pots, materials of houses, timber &c., and sought Government relief only when they were at the end of their resources.

95. The tests are exhaustive enough and no change seems needed.

96. *Vide*, please, answer No. 95.

97. A separate register of births and deaths was ordered to be kept in Village Form No. 14 at each work as if it were a separate village. This register was kept by the Civil Officer, and where there was no such officer it was kept by an officer of the Public Works Department. A copy of it was sent monthly to the Mámlatdár for submission to the Sanitary Department as copies of village registers are sent to that department. Separate registers were also kept of persons dying of small-pox and cholera, and these were also sent daily during the prevalence of these diseases to the Sanitary Department. Births and deaths in poor-houses within municipal limits were incorporated in the returns of those limits, but where the poor-houses were situated not in municipal limits, births and deaths occurring in such houses were incorporated in the registers of villages where the houses were situated.

98. The very high mortality on the works, in the poor-houses and among those on the village dole was for the most part due to the consumption of Burma rice mixed with lime, which brought on diarrhoea and dysentery especially during the hot months when people had to quench their thirst so often with water exposed to the heat of the sun. Orders were given to the Modis (grain suppliers) to wash the rice before issue, but this was not practically done, and drinking water though kept in jars under sheds was not often sufficiently cool. Rotten and mixed grain (barley with wheat and maize, &c.,) was not unfrequently given through the neglect or connivance of low-paid civil officers. In the same way short quantity was not seldom given by the Modis.

99. Orders were issued at a later stage (May 1900) to all Medical Officers on famine works to obtain the whole supply of water from existing wells or wells sunk in the beds of streams in clean vessels and deliver it into large receptacles near the camps, from which it was served out to workers as required. None except Bhistis were allowed near wells to draw the water. These wells were disinfected from time to time as occasion required, and when cholera

prevailed, with permanganate of potash twice a week. No such precautions were, however, taken at first and hence impure water contributed to high mortality previously.

100. On works and kitchens attached to works the following special arrangements were made.

Non-working children who could walk were kept in an enclosure during working hours so as to prevent their interference with the workers and fouling the working camp. The dwelling camp was cleared of all people during the working hours, except the guards and those who had to clean the camp. This was necessary as old people and children used to occupy the huts and defile them all day. Trenches were dug a foot deep, the soil below was loosened and the Bhangis renewed the solid matter with a little earth daily, and the liquid matter was absorbed by the loose earth. When the trench became offensive it was filled up and another dug. People from infected localities were not allowed to enter healthy camps. They were segregated, watched, and after ten days drafted to the works if free from cholera. Dead bodies of persons dying from cholera were ordered to be burnt, other dead bodies were also ordered to be burnt, except when fuel could not be obtained, when they were buried deep at some distance about half a mile from population. These arrangements were supervised by the civil officers and occasionally by the higher officers—Mámlatdárs Divisional Officers, Collector and Medical Officers also. At poor-houses the surroundings were kept clean, a separate place at some distance was assigned for obeying the call of nature, and dead bodies were burnt or buried at some distance from population, and the wells in use were disinfected with permanganate of potash. These arrangements were supervised by the superintendents of the poor-houses and occasionally by Mámlatdárs, Divisional Officers, Collector and Medical Officers.

101. Civil Officers regularly inspected the grain shops on the works. Other superior officers, such as the Mámlatdárs, Divisional Officers, Collectors and Medical Officers also inspected the shops occasionally. I am not aware of any detection of the sale of unwholesome grain by the Civil Officers, but detection of mixture of inferior sort of grain and bhusa (bran) was made in a few cases by Medical and Divisional Officers.

102. The poorer classes of people supplemented their food with "*Mankhi*" "*Samo*" and "*Thek*," wild grain, after rainfall of July last for about 3 or 4 months. The use, however, of these wild products unmixed with chhás or ghi brought on constipation and consequent fever and weakness. Bir roots were also much used in the beginning of famine.

103. The immigration from Native States was something enormous, the immigration being on an *average* from $\frac{1}{4}$th to $\frac{1}{3}$rd of the total number relieved. On the Modása works the number was about $\frac{3}{4}$ths of the number relieved.

104. Cannot obtain these figures.

104. (*a*) Orphans were made over to missionaries and native orphanages, and were kept in the poor-houses or on the village dole also to be eventually handed over to their lawful guardians if claimed.

105. None.

106. There were several complaints by private individuals also, who had gone to distant places to import grass, against the Railway authorities not being prompt in booking fodder. *Vide*, please, answer No. 65 (latter portion).

107. The Survey Commissioner used to send monthly a note and statement regarding the import and export of food-grains, and these statistics were reliable.

108. Complaints were heard in July last that agriculturists experienced difficulty in getting field-labourers owing to the grant of dole, and orders were consequently given by the Collector in July or August to reduce the dole. People experienced difficulty in getting a sufficient number of labourers to cut grass in extensive bir lands when it was ready.

109. (*a*) For the last three years or so, when the rainfall was either too much or too little, there has not been any appreciable increase of double cropping. Double crops are raised, *e.g.* wheat or gram, after the rice is reaped in years of sufficient rainfall, *i.e.* neither more nor less than required.

(*b*) Since the increase of mill industry people have taken to the cultivation of cotton for the sake of larger grains. Tobacco also which fetches a good price has been substituted of late. No food-grains have been substituted for these and other valuable crops.

110. Payment is made in cash at the rate of two annas or two annas and six pies, but the wage is not increased with the increase of price.

111. Persons drafted to the works were not given pay as provided for in the amended Section 84 (*b*), but were fed at the poor-houses or village dole at every 12 miles and the authority of chits given by the Circle Inspector or relief officers. This departure was intended to prevent such persons running away with the cash given them.

In giving relief to pardanishin women under Section 150 of the Code, no work, such as spinning cotton or winding silk, was taken from them in return, as provided in the section, the reason being that they were unable to do this work, not being accustomed to it, and the money spent on the purchase of raw materials would have been wasted.

New arrivals on works were paid an advance of one anna each daily until pay day, instead of being paid their wages daily as provided in Section 82 of the Code. This departure was obviously justifiable.

Able bodied persons were also put on the village dole on the outbreak of cholera to save them from starvation.

Dependants of poor cultivators who were given charity money to carry on their cultivation were put on the village dole if unable to assist such cultivators in agricultural work.

112. Staff Corps Officers and military native men were employed in supervision and to assist search parties. Officers of the Postal and Customs Departments were also employed in supervision. Deputy Educational Inspectors, Assistant Deputy Educational Inspectors and Forest Officers could have been employed especially during the rains, when they have not much work.

113. Superintendents of poor-houses were appointed from the non-official class, but the scheme was not in my opinion successful, as there was no proper supervision exercised by such people and irregularities were the result.

115. Small cultivators and agricultural labourers, who are accustomed to stay at home amidst familiar surroundings, are generally averse to go to relief works at considerable distance from their homes, and reside there, leaving behind their land and cattle which they have in large or small numbers as their main source of support. Much rather would they suffer privation than live with their women and children amongst strangers the life of loneliness and anxiety which is their lot at distant relief works. They would prefer to die at home rather than in distant climes, and died they have, I am afraid, in large numbers. The case of the professional labourers is quite different, as they are accustomed to go where they can find labour, but it was a new experience to small cultivators and agricultural labourers who would not have felt the situation so hard and difficult had works been opened in their own tálukas or within a reasonable distance, say 8 or 10 miles, from their homes. In this case they would have been able to go to the works in the morning and return in the evening attending to their land, cattle &c., and enjoying themselves as usual in their spare hours. I think there should be two classes of works started just when they are required. Big works (such as road-making, railways, big irrigation tanks &c.) for professional labourers only and small works (excavation of small tanks &c.) for the agricultural population only. The former can be at any distance from the homes of professional labourers and the latter as near the homes of agriculturists as possible. It is the agriculturists and not the professional labourers that are entitled to our special consideration. The professional labourers and agriculturists will thus be kept apart, each class working amidst its own people and avoiding distasteful contact with one another. The number of small tanks is sufficient enough for the employment of agriculturists during distress.

D. N. NANAVATI,
District Deputy Collector, Ahmedabad.

Camp Morimubarak,
12th January 1901.

RAO BAHÁDUR BHIMBHAI KIRPARAM, TALUQDARI SETTLEMENT OFFICER, AHMEDABAD.

The President.—What are your functions ?

A.—I am Taluqdári Settlement Officer of four districts of Guzerát, Ahmedabad, Kaira, Broach and the Panch Mahals.

Q.—What does the term taluqdári mean ? Does it mean a sort of *zamíndári* right ?

A.—The taluqdári of Guzerát differs from those of Northern India and the Central Provinces in this way, that the latter are the creations of our Government, though some were original landholders, whereas the taluqdárs of Guzerát are descendants of the old dynasties who ruled in Guzerát.

Q.—They are landed proprietors ?

A.—Yes.

Q.—They are landlords in the sense that one understands in Northern India ?

A.—Yes.

Q.—Do they hold their lands subject to the payment of Government revenue ?

A.—Yes.

Q.—And they have tenants ?

A.—Yes.

Q.—Do they cultivate land themselves ?

A.—Yes.

Q.—Is there a home farm ?

A.—Yes, we call it *ghar-khet*

Q.—The principle is exactly the same ; the landlords may have from 500 to 5,000 acres and may pay anything from Rs. 500 to Rs. 5,000 as Government revenue ?

A.—The Government *jama* is terminable every 30 years.

Q.—The Government *jama* varies, does it ?

A.—Yes.

Q.—Does the Government assessment follow the rent, or is it assessed independently or the rent paid to the taluqdár ?

A.—The rule before 1886 was that the taluqdár paid according to guess work. The *telati*, *mamlatdár* and officers did not make any detailed inquiries ; they simply proceeded on guess work. The *mamlatdár* only assumed that such and such a taluqdár obtained a revenue of so many rupees, and then one-half in some cases, and one-third in others, was taken as the Government revenue. In 1886 Sir J. Peile introduced a new system under which the lands were measured and surveyed and classed and assessed in the same way as the *khalsa* villages were assessed. When the assessment was completed the Government officers proposed a reduction of the assessment. The following principle was adopted, *viz.* that 60 per cent. of the assessment on occupied land and 35 per cent. of the assessment on unoccupied land was to be levied from the taluqdár as Government *jama* ; 40 per cent. was to remain with the taluqdár. These were the general principles, but in practice these principles had to be put aside. The Survey Department assessed the taluqdári estates to such an extent that it was perfectly hopeless to apply the rules. In some cases the *jama* exceeded the receipts, so the taluqdári officer had to have his *jama* reduced on a consideration of the assessment and condition of the taluqdár and other causes.

Q.—Had the survey assessment rates any connection with the rent-rates which the tenant paid to the taluqdár ?

A.—No ; the survey assessment had no such connection.

Q.—Have they now ?

A.—Yes. The survey assessments were made by the Survey Officer independently of the revenue realized by the taluqdár, independently also of the condition of the taluqdár and the producing capacity of the estate. They simply measured classes of land according to their own scientific rules. Subsequently we found that the assessment made by the Survey Department could not be treated as the basis of our settlement, so we adopted a different principle. As a typical instance I may explain a case which will show everything. In the Danduka *taluqa* the assessment fixed by the Survey Department amounted in all to only 9 per cent. over the amount of the original assessment.

Q.—The original assessment of 30 years ago ?

A.—Yes. 9 per cent. would seem to be very moderate, but when I analysed it and calculated the *jama* to be paid by each estate I found that the enhancement varied from ·72 to 750 per cent. This was on the whole *taluqa*, so we could not base our recommendations on the survey settlement figures and we based our recommendations on different considerations, and Government sanctioned our proposals. Originally the Government decided that the *jama* should be fixed on the basis of the survey settlement ; when it was pointed out that the survey settlement figures could not be relied upon Government changed the policy and the orders and gave us instructions to fix our *jama* independently.

Q.—What was the principle upon which the Taluqdári Settlement Officer proceeded to fix it ?

A.—The area under cultivation and the amount received by the taluqdár from his tenant.

Q.—The whole area with the exception of the home farm was let to tenants?

A.—Yes.

Q.—How did you deal with the tenant area?

A.—Almost all, except a few villages, are *bagxwat*, *i.e.* the crop share system (*batai*) obtains in all the villages of the taluqdári area.

Q.—You have no cash rents?

A.—No, so of course we have to find out from the accounts we keep for each taluqdári. We keep accounts for each estate, not Government accounts; the taluqdárs have their own books and we check the books.

Q.—Have you any *telatis* in these villages?

A.—Yes. Then we ascertain from the books what the taluqdár got from his tenants during the last five to ten years; then we compare the survey rates to find out the producing capacity. We first found the crop area, then the revenue realized by the taluqdár, then we took into consideration the survey assessment, and then the waste which would be likely to be cultivated within the next few years.

Q.—It was a prospective assessment?

A.—Yes. We took that into consideration, also the condition of the taluqdár and made arrangements for the division of the crops.

Q.—The survey assessment is in money?

A.—Yes.

Q.—And the taluqdári rent in grain?

A.—Yes.

Q.—Do you convert the grain?

A.—Yes, into cash produce.

Q.—Do you compare the survey assessment and cash rent together?

A.—Yes.

Q.—How have you found them to agree?

A.—Where the survey work is carefully done there is not much difference, but where it is perfunctorily done the difference is great.

Q.—Is it in favour of Government or the taluqdár?

A.—In favour of Government. Sometimes it is in favour of a big taluqdár.

Q.—Is that system of assessment going on still?

A.—Yes.

Q.—And you endeavour to do the best you can in these conflicting interests?

A.—Yes.

Q.—You have made out the assessment?

A.—Yes.

Q.—What percentage is taken up for Government?

A.—I think in many cases cent. per cent. Many of the taluqdárs had to go to relief works, which is sufficient evidence. Cent. per cent. if not more, and if more, the taluqdár pays it by borrowing money.

Q.—If the taluqdár has only one village, from that one village do you ever take cent. per cent.?

A.—The taluqdár's receipts in many cases fall short of the Government *jama*.

Q.—The settlement is made for all the villages and not for the individual villages; the assessment may then only come to about 30 or 40 or 50 per cent. of the whole?

A.—The difference is this, that in Guzerát our taluqdárs have not, except in four on five cases, got more than one village.

Q.—As a rule do the taluqdárs under your control pay on an average 60 per cent. of the assets to Government?

A.—Sixty per cent. represents the whole revenue of the estate.

Q.—Say the taluqdár gets from his estate from all sources an income of Rs. 100: does the Government take more than Rs. 60 or less? Is the settlement on a basis of 60 per cent. assessment of the assets?

A.—Yes, it is; but 60 per cent. represents in many cases the whole income of the taluqdár's estate.

Q.—Do you mean this, that although the taluqdár ought to obtain Rs. 100 from his tenants, he does not get it?

A.—The taluqdár must take according to the *dhara*.

Q.—I understand 60 per cent. is struck on a fixed share which the taluqdár takes?

A.—No, 60 per cent. is fixed on the assessment fixed by the Settlement Department. Sixty per cent. in many cases represents the total income of the estate.

Q.—Would it represent the total income if the taluqdár had been able to collect all his dues?

A.—Yes. Six years ago in some parts of Danduka *taluqa* the taluqdári *jama* was raised. They said "We have nothing to pay the *jama* with" and the estates were handed over to Government to be managed by them. I reported that the receipts realized under Government management during the last seven years fell short of the *jama* fixed by Government. The matter is now under consideration and I think there will be a reduction.

Q.—Do you fix the assessment upon *ghar-khet* land?

A.—Yes, not only *ghar-khet*, but also on alienations, from which no revenue is realized.

Q.—Could the taluqdár not sue for assessment of rent?

A.—No, there is no prescriptive right.

Q.—So far as I understand the position it is this, that you have an estate belonging to a taluqdár which is occupied by tenants who pay him rent in grain, that the taluqdár has a home farm land called *ghar-khet,* that Government claims to assess its revenue upon this estate in accordance with the immemorial principle of the country, that every acre of cultivated land owes a share of the produce as Government revenue. That principle comes from the Moghul times, and is embodied in the regulations of 1793, and in all other regulations which have since been passed. Well, in accordance with these well established principles Government proceeds to ascertain what should be the revenue assessed upon this estate. It enters on the estate and ascertains what is the rent which the taluqdár receives in grain. That is ascertained from the grain accounts which are kept in the village by the landlord or *telâti,* and from these accounts, extending over a series of years, you come to ascertain that the landlord receives for a particular class of land a certain proportion of grain, $\frac{1}{3}$, $\frac{2}{5}$ or some part of the harvest. The harvest is appraised and the value of that quantity of grain can be ascertained for the purposes of the Government assessment. That is converted into money rent. Then you deal with the *ghar-khet* land and apply to that land the rent-rate which you deduce from the rates arrived at from the grain rents paid by the tenants. You then ascertain what the assets of that estate are, that is what the value of the grain rent is and what is the value of the grain that the landlord gets from his home rented land. Having come to that you then proceed to determine what share the Government revenue should be. You say the basis of the assessments should be an assessment of 60 per cent., that is the principle upon which the Government proceeds. You say the Survey Settlement Department made out an assessment which ignored the arrangement between the taluqdár and his tenant and the produce of the home farm land, that they made their own assessment. You also say that the sum which you arrived at, 60 per cent. of the calculated assets, was sometimes more than 100 per cent. of the actual assets?

A.—Not in all cases.

Q.—You might have within a *taluqa* several villages; you might have one village assessed at 200 per cent. of the assets, while other villages were only assessed at 3 per cent., the average of the whole being 40 to 60 per cent. the taluqdár pays on the whole?

A.—There are few taluqdárs who own more than one village: there may be 100 sharers in the case of a single village: practically our taluqdárs are cultivators.

Q.—The outcome is that the taluqdárs in your charge are highly assessed?

A.—Yes.

Q.—Well, then, is there before the Government at present any proposal to consider and modify the land revenue system in the taluqdáris?

A.—Yes.

Q.—You have given your advice upon that point and you hope to have satisfactory orders no doubt?

A.—Yes.

Q.—Well now we come to the famine. I understand you are here to speak of the revenue system and not particularly of the details of the famine. Had you any famine administrative functions to discharge?

A.—I was in charge of a large relief work in Ahmedabad and visited all the famine works in the four districts.

Q.—What is your opinion regarding the management of the public works in the four districts?

A.—The Public Works Department tried to manage very satisfactorily. I don't want to make any reflections.

Q.—I am talking about the system. What is your opinion of it?

A.—The system requires modification.

Q.—Do you consider that the staff of the Public Works Department were sufficient?

A.—Not at all.

Q.—Do you consider that the staff was comptent or incompetent?

A.—Mostly incompetent.

Q.—Do you consider that on the whole the people employed on works got the wages which they earned?

A.—I think there was pilfering.

Q.—What percentage of the wages would you say went in pilfering?

A.—Fifteen per cent.

Q.—Do you think that gratuitous relief in the villages was satisfactorily administered? Were all the people who should have been put on gratuitous relief put on?

A.—I think not.

Q.—You heard of the reduction of wages in the Broach district in February or March. Did you notice any injurious effects from that reduction during your travels?

A.—No. I didn't visit Broach after the reduction was made.

Q.—Did you find that that reduction had any effect in increasing the number of labourers in other districts?

A.—I think so.

Q.—There has been very great mortality amongst the cattle?

A.—Yes.

Q.—What percentage of the cattle have died?

A.—I think 80 per cent.

Q.—That has seriously crippled the resources of this province?

A.—Yes, the loss of cattle to January represented a loss of Rs. 2,62,00,000.

Q.—I have been told that there is much indebtedness. Of the total population of Guzerát 60 per cent. depends on agriculture. Of that number how many are hopelessly indebted?

A.—One-half.

Q.—Of the remaining half how many are free from debt?

A.—Not more than 10 per cent.

Q.—Do you think the people who are more or less in debt save from one year to another?

A.—The half who are hopelessly in debt cannot save anything; of the others I think 10 per cent. can save.

Q.—Well, that being so, do you think that they have difficulty in paying Government revenue in bad years?

A.—Except 10 or 15 per cent. all find it difficult to pay revenue in bad years.

Q.—What is the incidence of Government revenue on the gross produce of the province as a whole?

A.—According to my calculations it comes to between 18 and 22 per cent.; about 20 per cent. This implies that the whole land is under cultivation, whereas there is a large portion fallow, for which the cultivator has to pay rent, though he does not get anything out of it.

Q.—Does he pay the full rent when it is fallow?

A.—Yes.

Q.—He does not pay rent for the fallow under the taluqdári system?

A.—I refer to the *khalsa*.

Q.—Do you think it would be a substantial assistance to the tenantry of Guzerát if in these circumstances there was a system of suspension of the Government demand in whole or in part in bad years, not famine years?

A.—I think so.

Q.—Do you think it would be fair in these circumstances to distinguish between the actual cultivator and the *bania* or money-lender if he was the holder of the field?

A.—I am not inclined to make any distinction, whether he is a money-lender or not.

Q.—Would you give suspensions to all?

A.—Yes.

Q.—What is the reason?

A.—I think the *banias* of Guzerát do not deserve so much abuse as they get. The Guzerát *banias* do not invest money in land for the land's sake: they only do so for the sake of the interest. We have not got large capitalists. In a place like Ahmedabad, where there are many large traders, they would not like to invest money in land, having got other resources. There are very few *banias* who advance money in order to get possession of the land and become *zamíndárs*; there is no such feeling amongst the *banias* of Guzerát. If *banias* are treated differently to the cultivators they will add to the account of the cultivators.

Q.—You would advocate uniformity of treatment as much in the interest of the cultivators as of the *banias* themselves?

A.—Yes.

Q.—Are the *banias Márwáris*

A.—Here, on the north side of the Nerbudda, they are ordinary Guzerátis.

Q.—In the matter of suspensions would you distinguish between suspensions and remissions, would you in the case of crop failure suspend first and afterwards consider whether there should be remission, or would you consider in the first place if the crop is less than a 4-anna one that there should be absolute remission?

A.—Yes, there should be absolute remission, but who will determine the anna valuation?

Q.—I suppose the *mamlatdár*, subject to the control of the Collector. Can you trust your subordinate fiscal agency?

A.—I would not trust subordinates. Certainly not the *telâti*.

Q.—Do you think the Revenue Inspector is much better?

A.—No.

Q.—What about the *awal karkun*?

A.—I would not trust him either. I would trust few *mamlatdárs*.

Q.—Is there any means by which you could improve the agency?

A.—If a report is received from the officer in charge of a *taluqa*—they of couse know their own districts,—that the crop is less than a 4-anna or 6-anna or 7-anna one, I would send one or two special officers round the village to see the crops themselves.

Q.—You have no very great vicissitudes of season in Guzerát, such as hailstorms or floods, have you?

A.—No.

Q.—There has not been such a famine in Guzerát for a century?

A.—No.

Mr. Nicholson.—The chief wealth of a Guzeráti lies in his cattle?

A.—Yes.

Q.—Consequently this terrible loss has greatly deteriorated his tillage power and resources for the future?

A.—Yes.

Q.—It is a loss which cannot be recouped in 8 or 10 years?

A.—No.

Q.—And so in case of a future famine you would devote all your efforts to the keeping of the cattle alive ?

A.—Yes.

Q.—Can you give any distinct suggestion by which the present arrangements for keeping cattle alive could be improved ?

A.—I think there are many waste areas in most of our *taluqas*, and if the grass of these areas is preserved and a certain amount stored it would be of great use.

Q.—Have you any other suggestion to make, the growth of fodder crops for instance ?

A.—I am also inclined to introduce the raising of *sinda:* if the Agricultural Department proposed that it would be a good thing to try.

Q.—Do you think there should be grants of *taqávi* made during the next 15 or 20 years to encourage the development of well digging ?

A.—With money we could do anything: Ahmedabad is a district where there is so much good waste land and it is found in compact blocks. It is lying waste.

Q.—Why ?

A.—For want of cultivators.

Q.—As regards Danduka, I should like to know whether it is the fact that the area of cultivation has greatly fallen off ?

A.—I should like to know who has prepared these returns ; in the first place there is no one to give this information. With the exception of 12 villages the whole of the *taluqa* is taluqdári : there is no record system from which the actual areas can be computed.

Q.—Do you think the cultivated area is increasing or decreasing ?

A.—Decreasing.

Q.—From what causes ?

A.—The chief cause is the agricultural depression of the past six or seven years.

Q.—What is the cause of the agricultural depression ?

A.—Over-assessment.

Q.—Do you speak from actual knowledge ?

A.—Yes.

Q.—I am not alluding to taluqdári ?

A.—No, *khalsa.*

Q.—Are there any other causes ?

A.—The seasons have not been good for the past six years : the rainfall has been small and badly distributed.

Q.—Are there any other causes, indebtedness for instance ?

A.—I don't think indebtedness has had much to do with it.

Q.—Up to the present famine there was abundance of tillage cattle in the country ?

A.—Yes.

Q.—The area of non-food crops has considerably increased, has it not ?

A.—Yes, the Guzeráti is dependant on the food crops of other districts. It is a sign of depression that the cultivator grows *bájra.*

Q.—Are not wheat and cotton more paying than *juár* and *bájra ?*

A.—Cotton and wheat are subject to many conditions.

Rai Bahadur Syam Sundar Lal.—Did you arrange to give *taqávi* to taluqdári cultivators ?

A.— Government gave us a liberal quantity.

Q.—Did not the *banias* help you ?

A.—They helped in this way that during the last sowing time they advanced grain to most of our taluqdári tenants on my assurance that I would give them back the seed money out of the produce as a first charge.

Q.—What do you think is the average produce of cotton per acre ?

A.—It is a difficult question to answer : I can give you a rough idea, it varies in each district.

The President.—What is an average acre of cotton worth ?

A.—It varies. In Ahmedabad an acre of cotton would bring 240 pounds of seed, and clean cotton would be Rs. 15 an acre.

Q.—Is that on bad land or good land ?

A.—Ordinary land. In Broach it would be 320 pounds, equal to Rs. 28. Broach and Ahmedabad are the cotton growing tracts,

Q.—You attribute the pressure in these districts partly to over-assessment ?

A.—In some tracts.

Q.—What tract was over-assessed ?

A.—Prantij, the dry crop lands in Ahmedabad and Kaira and certain villages of the Broach district.

Q.—It is the case only in particular localities. Guzerát as a whole is not over-assessed ?

A.—No.

Q.—There are certain tracts the original assessment of which requires revision of settlement and Government have made inquiries regarding them ?

A.—Yes.

Ra'o Baha'dur Bhimbhai Kirparam.

Replies by Ráo Bahádur Bhimbhai Kirparam, Tálukdári Settlement Officer, Gujarát, to questions drawn up by the Famine Commission.

1. Gujarát was not ordinarily liable to famine, and no indications of its appearance in such an acute form was perceptible in the beginning of the season. Fields were prepared as usual in full expectation of a favourable season. The monsoon broke about the middle of June, and good rain fell in the second and third weeks which was sufficient and seasonable for *kharif* sowing in all except a few tálukas where the rainfall was less than one-half of the average as shown in the margin. July and August passed practically without rain except in a few places where it amounted to between an inch and two. Panic set in and the people were found unprepared to meet this unexpected calamity. In September the rainfall did not amount even to an inch in the majority of tálukas, and elsewhere practically there was no rain. All agricultural operations came to a stand still and *kharif* crops withered, except those that were irrigated. Fodder was scarce and cattle began to starve. In October when rain, favourable to *rabi* sowing, is expected, it failed us entirely. Kharif crops mostly failed, *rabi* sowing was suspended and cattle began to die.

Táluka.	Average of 11 years.	Fall in June.
A'mod	7·12	2·61
Thásra	6·37	2·84
Borsad	6·28	2·79
Modása	6·74	2·97

The good season of 1897-98 was some relief to the agriculturists after a succession of five unfavourable years.[1] In Ahmedabad and Kaira the later rains

[1] The following table (compiled from the Reports of the Agricultural Department) shows the anna valution of the principal crops calculated on the standard of 16 annas to the normal crop.

District.	Crops.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.
Ahmedabad ...	Jowári ...	7	6	5	8	7
	Bájri ...	7	5	4	10	9
	Wheat ...	11	12	11	9	13
	Cotton ...	9	10	10	11	9
Kaira	Jowári ...	9	9	8	8	3
	Bájri ...	9	12	8	10	5
	Wheat ...	12	12	13	...	10
	Cotton ...	10	10	8	9	7
Panch Mahals ...	Jowári (maize)	11	5	6	12	8
	Bájri ...	7	8	7	8	6
	Wheat ...	11	9	11	8	4
	Cotton ...	8	9	5	9	6

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affected the quality of wheat and *bájri*, but this was compensated by a greater outturn. In the Panch Maháls, the rainfall, though less, was seasonable and well distributed, but the *rabi* crops suffered on account of the comparatively early close of the monsoon. Hence the yield of rice was deficient and the *Mahuda* crop, which forms the staple food of the aboriginal tribes for a certain part of the year, was poor. In Broach all the crops were excellent except wheat which, though greater in quantity than in the preceding year, was only sufficient for local consumption. The year would have proved very prosperous but for the very low prices caused by plague and its attendant evils.

The season of 1898-99 promised well at first, but the rains, however, proved insufficient in August and ceased almost entirely after a heavy fall in September. The *kharif* and *rabi* crops were generally good, but the uneven distribution affected them in some places in the Ahmedabad District, where the yield of wheat and *bájri* amounted to six and three annas (respectively) only in the rupee. In the latter part of winter the *rabi* crops in Broach and other places were damaged by frost; while in Kaira the yield of *bájri* was excellent. But the prevailing prices were very low as in the preceding year.

2. Reliable figures showing the area of *kharif* sowings are not available for all the Tálukdári villages, but the results of special enquiries made at the time shewed that the sowing was far below the normal.

3. The following table shows the rainfall in the four districts of the Northern Division during the season of 1899 as compared with the average of 11 years ending 1897. The 1899 rainfall in Ahmedabad and Kaira was about one-fifth of the average, while that of the Panch Maháls and Broach amounted to one-fourth of the average. The average rainfall during 1899 varied from 5·96 in Ahmedabad to 9·45 in the Panch Maháls against the normal average of 29·61 in Ahmedabad to 36·63 in the Panch Maháls.

Rainfall during the rainy season of 1899 *compared with the average of* 11 *years* (1887-1897).

No.	District.	June.		July.		August.		September.		October.		Total.	
		Average of 11 years.	1899.	Average of 11 years.	1899.	Average of 11 years.	1899.	Average of 11 years.	1899.	Average of 11 years.	1899.	Average of 11 years.	1899.
1	Ahmedabad ...	5·06	4·33	12·11	0·19	7·41	0·47	4·44	0·93	·59	0·04	29·61	5·96
2	Kaira	6·03	4·61	14·82	0·52	9·95	0·04	5·13	1·30	0·73	0·03	36·66	6·50
3	Panch Maháls ...	5·71	6·57	13·9	1·15	10·84	0·12	5·87	1·58	1·12	0·03	36·63	9·45
4	Broach	7·82	7·86	15·39	0·42	7·0	0·37	4·75	0·57	1 41	0·01	36·37	9·23

4. The actual *kharif* harvest of 1899 was about one per cent. of a normal harvest on a normal cultivated area. North Gujarát being mainly a *kharif* tract as will be seen from the figures given in the margin, in some places the average of *jowári* and *bájri* (which are usually sown from June to July) was more than one-half of the normal area. The cultivation of these crops entirely failed except in a very few places where irrigational facilities existed. Rice seedlings were prepared as usual in June, but they withered in July and August for want of rain. Cotton and wheat which are sown respectively in July and October were not put in ground at all as no rain fell after the end of June.

	Kharif, Per cent.	Rabi, Per cent.
Ahmedabad ...	77	23
Kaira	93	7
Panch Mahals ...	83	17

5. According to the census of 1891, husbandry supports 1,876,700 persons or 60·57 per cent. of the total population of the British Districts of Gujarát. The percentage varies from 49 in Ahmedabad to 74 in the Panch Mahals. The percentage of petty cultivators is 47, while that of the labourers is 13. The following table shows the details :—

	Ahmed-abad.	Káira.	Panch Mahals.	Broach.	Surat.	Total.
Land occupants	183,284	297,521	165,770	92,761	224,158	963,494
Tenants and sharers ...	147,946	222,871	48,036	51,112	26,503	495,968
(1) Total ...	331,230	519,892	2,13,806	143,873	250,661	1,459,462
Percentage	35·93	59·6	68·2	42·1	33·53	47·13
Farm Servants	14,437	9,472	9,895	10,658	16,109	60,571
Field Labourers	89,273	56,970	6,852	44,246	125,006	322,347
(2) Total ...	103,710	66,442	16,747	54,904	141,115	382,918
Cattle-breeders	4,654	2,042	1,275	201	50	8,222
Herdsmen	14,383	5,309	1,983	1,029	3,363	26,067
(3) Total ...	19,037	7,351	3,258	1,230	3,413	34,289
Percentage of 2 and 3 ...	13·3	8·46	6·38	16·4	22 23	13·4
Grand Total ...	453,977	5,93,685	233,811	200,007	395,189	1,876,669
Total Percentage on the total population of the District	49·25	68·11	74·6	58·56	60·79	60·57

The professional husbandmen include eight main classes, *viz.*, Bráhmans 40,000 ; Kanbis including Sathvárás and Káchhiás 380,000 ; Rajputs 128,000 ; Kolis 775,000 ; Aboriginals 384,000 ; and Musalmáns (Bohrás) 65,000 ; in all 1,772,000 or 57·19 per cent. of the total population of the British Districts of Gujarát.

In the rural parts all classes including Bráhmans are interested in tillage as land-owners, if not as husbandmen. Among Bráhmans, the Anávlás are the most skilful and hardworking husbandmen of South Gujarát. With few exceptions, Rajput

husbandmen, though not wanting in intelligence or skill are careless, slovenly and idle. Except in large towns, all craftsmen and personal servants eke out their living by the help of husbandry or field labour. Kolis and other early tribes are chiefly supported by tillage. Most of these classes dislike steady work and are wanting in care and skill. To this the Talabda Kolis are an exception, being nearly, if not quite as good husbandmen as Kanbis. Some of the early tribes of Surat, chiefly Dublás, Dhundhiás and Chodhrás have become skilful cultivators owing to their association with Bhátela and Kanbi cultivators. Of the depressed classes, Dheds and Bhangis cultivate during the rainy season. Of late among pleaders, medical practitioners and Government servants, the practice of putting their savings into land has been growing more common. Both Vánias and Márwádi moneylenders and traders, buy land from peasant debtors, but neither till it themselves nor spend money in improving it. They seldom see it except at harvest time when they go to recover their due in kind from their tenants.

Except the Sunni Bohrás who are steady and skilful husbandmen, the few Musalmáns who own land are idle and unskilful and wanting in energy and perseverance. Pársis who were once famous husbandmen have almost given up tillage. The few who still earn their living as husbandmen are hardworking and skilful.

Preliminary Action.

6. Necessity of relief was assu[illegible] of crop failure: small test w[illegible]med from the fact Local Boards. Fa[illegible]orks were also opened by able ma[illegible]ine appeared in an unmistak[illegible]manner after the dry months of June and July.

7. The poor classes, including farm servants and labourers, were found wandering about in search o subsistence; large towns and cities were infested with beggars; edible roots were used for food purposes; cutting of trees and petty pilferings were common; cattle were fed on leaves; and reports were received from different places to open relief works.

8. Large relief works were started under the Public Works Agency to meet the increasing demand for work.

9. Effective programmes of relief works to be taken in hand were not ready because Gujarát was regarded as enjoying an immunity from famine.

13. Loans and Takávis were freely given at the outset to cultivators to raise fodder and grain by irrigation.

14. Loans were granted for the construction of wells in some places where they could be made, but most of the new wells were not successful—

(*a*) in securing the crop on the ground, because they were not completed in time;

(*b*) as a permanent improvement, because many have remained uncompleted for want of funds ;

(*c*) as a temporary measure to employ labour, because beyond the family of the cultivator very little outside labour was employed.

Large Public Works.

19. Large public works, such as tanks and drainage, were opened when it was found that regular relief works were needed.

23. Admission to the works was free to all persons ready to submit to the labour test; no distance test was applied, but compulsory residence was insisted on in many places.

24. A large central work of 5,000 people may be expected to serve an area of about 300 square miles. In some cases applicants for relief had to go more than 25 miles.

26. There was a Civil Officer for each charge. Except a few, all Civil Officers were taken from the ranks of Talátis and Kárkúns, and their salaries varied from Rs 30 to Rs. 50. The Civil Officer did not check the measurements nor did he fully carry out the instructions given at the end of paragraph 426 of the Famine Commission Report of 1898. Many of these duties were carried out by the Public Works Department.

27. The Civil Officer had nothing to do with the prescribed test.

28. The formation of a gang of 50 wherever made with reference to village and family by careful and sympathetic officers, was found to be successful and convenient to the workers.

32. My experience leads me to agree with the Famine Commission of 1898, that a system of payment by results is unsuited to the conditions of acute distress or actual famine. Even if works are started in time adequate relief cannot be afforded by the system of payment by results.

34. The scale was found adequate in all cases where (1) the task work was fixed according to the capacity of the worker and (2) the workers came in good condition and got quickly habituated to the work. New-comers generally suffered in health in the first fortnight when daily payments were desirable and when a light task was needed. As far as I have been able to ascertain the workers did not make any savings from their earnings.

38. Payments were made weekly as a rule. My experience leads me to think that more frequent payments are desirable and practicable. Payments otherwise than daily or bi-weekly subjected the workers to the mal-practices of the Bania, to say nothing of the temptations to spend recklessly soon after the pay day without any thought of the morrow.

39. Payments were not invariably made daily to new-comers during the early stages of famine

relief. The Banias did not lend on credit and those who came from a long distance suffered the inconveniences incidental to payments at intervals.

40. In some places payment was made to the head of the gang. I prefer payment being made to individuals.

Small Village Works.

52. Small works did not play an important part in the relief programme. A very few small works were opened to provide employment for Tálukdárs and others who could not join large distant works.

54. Small works were also opened on the outbreak of the cholera epidemic and when people were about to return to their homes for cultivation purposes. These were tank works conducted under the Civil Agency by direct management on the piece-work system.

59. My experience leads me definitely to the opinion that in times of acute famine, the system of small village works should be extended. They—

(1) afford adequate and substantial relief;

(2) avoid moral and physical evils common to over-crowding;

(3) are more profitable as permanent improvements;

(4) prevent the population by keeping people near their homes;

(5) obviate the necessity of costly camp organization;

(6) protect the workers against the intensity of heat and cold;

(7) prevent epidemic outbreaks which disorganise large relief works and;

(8) are economical and effective.

Special Relief.

66. Cattle camps were started and grass was imported and sold at cheap rates. These measures were successful. Deportation of cattle to Thána and other places was not a complete success.

Gratuitous Relief.

80. Cheap grain shops were opened at different places and managed by Government officials and private gentlemen. On the whole they gave relief to poor people.

81. These shops did not discourage the importation of grain; they helped to check speculation which had a tendency to force up prices. The general prices were not affected as the difference between the market prices and the cheap rates was a small one.

82 and 84. Eighty-seven per cent. of the Jama leviable from the Tálukdárs in 1899 was suspended before the collection began. No remission has been granted up to date.

83. Suspensions were based upon consideration of crop failure and capacity of the Tálukdárs. The latter was determined by the Tálukdári Settlement Officer from his personal knowledge. The Collectors, like Messrs. Gibb and Quin, who intimately knew the Tálukdárs examined the lists and approved of the suspensions.

85. Suspensions followed automatically in Tálukdári Estates. Crop share or *bhágbatái* system is prevalent in most of the Tálukdari Estates, and nothing was recovered as rent as there were no crops to collect from.

86. The suspensions reached the right person.

General.

89. People in receipt of relief belonged to lower classes mostly. They also included cultivators whose number I am inclined to estimate at from 10 to 15 per cent of the total number of workers.

90. People having had no experience of famines were not ready to resort to relief works, and their unpreparedness was a great difficulty in making effective arrangements.

91. Banias deserted their old customers and private credit was altogether shaken. People sold even the rafters and tiles of their huts before they went to relief works.

95. The mortality was very high. Indigestible, unwholesome and insufficient food, and want of whey and such other articles in daily use among the lower classes contributed to some extent to the increase in the mortality.

99. People largely used wild products which undermined their health and caused many deaths.

100. I observed considerable immigration from Native States. The proportion of these workers to the total number relieved was from 15 to 20 per cent.

103. I have no suggestions to make. Experience of this famine showed that the list was complete and did not require any modification. Complaints were loud and frequent in spite of the endeavours of the Railway authorities to meet the unexpected demand. The rolling stock was insufficient. Cultivators who had gone far along the Tápti Valley Railway, Bombay Baroda and Central India Railway and Indian Midland Railway to buy fodder for their famishing cattle had to wait with their purchased stocks at the stations for weeks together for want of trucks. Serious complaints were also received regarding the corruption of the station staff. It was also complained that the reduction of rates for the carriage of fodder did not give any substantial relief as a minimum charge was fixed for *each* truck. Local price of food was not to my knowledge raised by defects in Railway carriage.

106. The following table compiled from the reports of the Agricultural Department shows the

changes in the character of the crops sown during the seven years ending 1898-99. Except in Ahmedabad, the cultivation has not undergone any appreciable change. The figures in the table represent percentages of the area sown.

Years.	Ahmedabad.		Kaira.		Panch Mahals.		Broach.		Surat.	
	Food crop.	Non-food crop.	Food crop.	Non-food crop.	Food crop	Non-food crop.	Food crop.	Non-food crop.	Food crop.	Non food crop.
1892-93 ...	81	19	93	7	89	11	58	42	79	21
1893-94 ...	75	25	93	7	90	10	50	50	72	28
1894-95 ...	76	24	93	7	89	11	60	40	75	25
1895-96 ...	72	28	92	8	81	9	49	51	77	23
1896-97 ...	70	30	92	8	90	10	57	43	73	27
1897-98 ...	76	24	93	7	89	11	56	44	81	19
1898-99 ...	69	31	93	7	90	10	63	37	79	21

107. The practice of paying wages in grain prevails particularly for farm labour. There is no tendency to substitute cash for grain wages. Cash wages have risen in sympathy with the rise in prices.

109. Staff Corps officers were employed in supervision. In times of actual famine experienced and tried officers of the Judicial[1] and Educational Departments might, with advantage, be employed in supervision work, their places being filled up temporarily by new men who can easily be found from the lists of qualified candidates.

110. Non-official agency was made use of in connection with poor-houses, distribution of charity and stretcher parties. The Missionaries did excellent work, as also a few native gentlemen who volunteered their services in response to the invitation of District Officers.

BHIMBHAI K.,
Tálukdári Settlement Officer, Gujarát.

Ahmedabad, 12*th January* 1901.

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[1] Subordinate Judges were invested with First Class Magistrate powers in order to relieve Sub-Divisional Officers and Mamlatdárs.

Dr. BENJAMIN, NON-OFFICIAL, AHMEDABAD.

The President.—Are you able to speak for Ahmedabad?

A.—Ahmedabad city.

Q.—What were the characteristics of the diseases with which you were called upon to deal?

A.—We had a great deal of diarrhœa and dysentery, also jaundice, and then fever broke out.

Q.—Were the diseases such as you would expect from the pressure of want, as well as from bad food stuffs?

A.—Even well-to-do people had to use grain which was not good; the ghi and milk were bad.

Q.—Was that owing to the mortality amongst the cattle?

A.—Yes.

Q.—And there was a bad outbreak of cholera?

A.—Yes.

Q.—Did this sickness prevail much amongst immigrants?

A.—Among both the people of the district and immigrants.

Q.—Do you attribute much of the mortality to immigrants from Native States coming in in an enfeebled condition?

A.—I think it was the same among the immigrants as our people.

Q.—Do you think 20 per cent. of the mortality was due to immigrants?

A.—Yes.

Q.—Had you charge of a poorhouse?

A.—Yes, it was a private poorhouse.

Q.—Was there much mortality there?

A.—Yes, we admitted only the weak and sick into the poorhouse.

Mr. Nicholson.—Did you give relief to weavers?

A.—Yes, we gave them grain; they were not relieved at their own trade.

Q.—Why was that?

A.—Because they were weavers of fine cloth?

Q.—Gold lace weavers?

A.—Yes.

Q.—Their looms could not have been adapted to the weaving of coarser cloth?

A.—No.

Q.—Did they come to works?

A.—Yes, some did.

Q.—On the whole do you think that after the famine there were as many looms working as before?

A.—The number is not up to the normal.

Rao Bahádur Syam Sunder Lal.—In the last paragraph of your answer to the written questions, you say "it will be seen that there is scope for the extension of non-official agency." Had you any experience?

A.—Yes.

Q.—You were associated with the distribution of relief to *parda-nashin* women. Was this relief from Government?

A.—No, the relief to weavers also was from general funds.

Q.—There was a committee formed, who was the chairman?

A.—Mr. Nana Bhai.

Q.—Were there smaller committees in other towns as well?

A.—I cannot say.

Dr. JOSEPH BENJAMIN.

Answers by Dr. Joseph Benjamin to some of the questions drawn up by the Famine Commission.

Question 7.—On 3rd September 1899 a dead body of a Koli woman belonging to Wadhiar Táluka of Rádhanpur State was seen under the Ellis Bridge here. Death appeared to have resulted from starvation and fever. Her four children were loudly bemoaning her loss and the husband was shedding tears. On the 4th idem, a Koli from Koth (Dholka) was seen eating parched gram, half of which was falling down. A Kumbhár (potter) from Viramgám and a Báwa from Rupal of Kálol Táluka in the Gaekwar's territory were seen. They seemed to be famine-stricken. On the 6th idem an old man of Baldána was seen cooking one pound of Mhowra flowers for himself and his two sons who seemed to have been without food for two days. On the 7th idem people from Márwár and Káthiáwár were seen in the city in groups of two, three, four or five and more, begging for alms. On the 8th idem a Koli from Limbdi was seen to be suffering from fever due to famine. Another Ráwal woman from Viramgám Táluka was also seen with fever due to starvation. There were many persons from Wadhiar; among them was a woman with two children, the husband having run away leaving them to their fate. A Dhed from Heranj (Nadiád) was seen, who was willing to give away his son to any one who would take care of him. There were Kolis from Khárághoda, a few Bhois from Tárápur (Cambay), and Kolis from Pátan (Gujarát) and Adwár (Dhandhuka), all in search of work as there was famine in their villages. On the 10th idem a famine-stricken Koli woman from Káthiáwár was seen, who had a short while ago been delivered of a child in the open. On the 12th idem famine-stricken people were seen on the road to Sháhibág. They belonged to Pálanpur and Rádhanpur. Outside Delhi Gate a family from Nágpur was seen. Under the Ellis Bridge a child of Ambasna (Viramgám) was seen in a dying condition. The parents were famine-stricken. On the 13th idem five Bráhmans from the Pálanpur territory had died outside the Sárangpur Gate from fever and starvation. There was also a Koli woman with a child only four days old, who seemed famine-stricken. On the 15th idem persons from Pátan, Wadhiar, Viramgám, Kadi, Limbdi, Chuda, Daskroi, Pálanpur, Sánand, Mehmadabad, Dhrángadra, Pátdi, Dhandhuka and Nadiád were seen outside the Sárangpur Gate.

8.—In the beginning itinerant relief was given in the shape of bread, milk, medicines and clothes

to such people as were found in dire necessity of such help by daily going round to the Ellis Bridge side and other places about the city.

11.—So far as the relief measures undertaken under our agency were concerned, organization of private charity was first undertaken and then later on a poor-house was opened in January 1900.

12.—From September 1899 we commenced to go round to see the condition of the famine-stricken people and to help them in some little way by means of local charity.

63.—No measures were taken so far as the city of Ahmedabad was concerned.

The Collector once inquired of the Chairman, City Relief Sub-Committee, Ahmedabad, if it would be feasible to give them work. But it was found that giving the city weavers work would require a large outlay, as they were weavers of dhotis, kinkhábs, mashrus, turbans, sáris, etc.

64.—Not being used to the work of digging, the weavers here did not generally go to relief works. They were in many cases, I think, physically unfit for digging. They are only used to weaving of the finer sort.

71.—So far as the city of Ahmedabad is concerned, Government opened a poor-house at Dhuliákot on or about the 25th November 1899. There were Government poor-houses at Sánand and Dholka which I saw besides others.

A private poor-house was opened by us on 19th January 1900 outside the Sárangpur Gate near Mr. Sorábji Karáka's mill, as many starved people were seen on that side and deaths occurred among them. In our poor-house Kolis formed the chief admissions. The highest number in our poor-house was about 500. The number would have been higher still, but with our limited funds we could not increase the number to more than 500.

Later on another poor-house was opened under the guidance of the late Mr. Manibhái Premábhái, the object of the poor-house being to collect the vagrants in the city and to send the weak and sick to the Dhuliákot poor-house and the able-bodied to Government relief works.

Mr. Jamiatrám Narbherám Thákor opened a small poor-house near the Kankaria Tank.

The Sháhpur people later on opened a poor-house outside the Sháhpur Gate.

Outside the Ráipur Gate also a few famine-stricken persons were kept and fed by private charity.

75.—So far as our private poor-house was concerned the inmates received a piece of bread for breakfast

in the morning, the weak and the children getting tea with milk in the morning. Khichdi of rice and pulse of mug with curry of whey was given. Ghee was added to the khichdi. Bread of wheat or bájri was given in the evening with pulse of mug or vegetables and ghee, salt and spices. The morning meal was given at noon and the evening at 6 P.M. The inmates were fed on the premises. Onions were also given in the morning with the morning meal.

74 (2).—Our poor-house ration was 8 oz. of dry khichdi in the morning with ghee about a tola to each adult and curry of whey about 4 oz. to each; and in the evening 1½ bread to an adult, the workers getting two breads and the children getting less according to age, was given with about 3 oz. of pulse of mug or 4 oz. of vegetables. The sick and the weak were given sago-conjie and milk or rice and milk. Bájri and wheat bread was always given; 2½ breads were made of one pound of flour. Ghee was applied to the breads. Little children were fed on milk, sago-conjie and rice and milk according to age.

78.—As the inmates of our poor-house were mostly Kolis, we had Koli cooks. We had a few Kunbi inmates who cooked their own food.

102.—In July 1900, when there was rain, the orphans of our poor-house were kindly taken over by Mrs. Lely, who sheltered them and fed them, and after a month had sent them away to their villages with clothing, etc.

110.—In the commencement itinerant relief was given to immigrants in the form of breads, milk, clothes, etc.

Clothes were distributed among the famine-stricken immigrants as well as the poor-houses at Dhuliákot, Sánand, Dholka and Mehmadabad, as well as at Chandula, Makarba, Maliksaban, etc.

As soon as the poor-house at Dhuliákot was opened, efforts were made to send the sick there.

Home relief was given to a few families in the city and surrounding villages.

In January 1900 a poor-house was opened outside the Sárangpur Gate with the help of Mr. Jehángirji Dinshaw Mehta, B.A., LL.B., and Mr. Sorábji Dinshaw Karáka. Monetary help was principally received from Mr. Mangaldás Girdhardás Párekh, Sir Dinsha Mánekji Petit and Mrs. A'vábái Frámji Petit, this philanthropic lady giving Rs. 1,500 and Sir Dinsha Petit giving Rs. 1,000 through Mr. Edalji Dorábji Taláti, B.A., Head Master of the local Government High School. The Honourable Mr. Lely paid Rs. 200 towards the funds of the poor-house, and Mr. Gibb, the Collector of Ahmedabad, paid Rs. 100. Contributions were also received from many other gentlemen both in money and clothing. All the contributions were voluntary. The unique features of the funds we received was that we had to make no appeal for funds, charitable ladies and gentlemen voluntarily contributing towards the fund.

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In our poor-house people came mostly from villages of Kapadvanj Táluka and of petty Native States nearly as well as from the Daskroi Táluka, etc. Many came in a very bad condition. Diarrhœa and dysentery were very common among them, both the diseases being not of the ordinary kind but being the result of starvation and eating raw gram, tamarind seeds, bad meat, etc. Fever with symptoms resembling typhus in many respects was prevalent in the beginning, redness of eyes being a prominent symptom. There was swelling of the feet noticed in some famine-stricken persons. In March 1900 a few cases of Purpura Hæmorrhagica were observed, there being bleeding from the nose and mouth, and in one case from the ears as well, whereas in another case from the private parts. Fortunately no cholera occurred among the inmates of our poor-house after admission, cases brought from the roadside being sent to the Government Cholera Hospital. Pipe-water was all along used for the inmates.

Out of Rs. 1,000 received from Sir Dinsha Petit, home relief was given to such families in the city as could not be helped out of the Government relief fund.

I was employed with three other gentlemen by the Collector in giving home relief to respectable poor people of the city from April to November 1900. Latterly Mahomedan gentlemen were added to the committee to help the Mahomedans.

We were also entrusted with the work of stretcher parties from 1st of May 1900 to 15th July 1900 by the Collector. A few dead bodies that were found undisposed of were buried from the funds at our disposal.

Mr. Talati undertook the work of sending back famine-stricken people to their homes in August 1900.

The Collector also employed non-official gentlemen to visit the orphanage located in Háthising's Wádi.

Mr. Pratt had clothes distributed at my hands at Chandula and Maliksaban.

Ráo Bahádur Lálshankar managed the Hindu orphanage.

Messrs. Govindráo A'páji Pátil, B.A., LL.B., A'nandshankar Bápubhái Dhru, M.A., LL.B., Harilál Desáibhái, B.A., LL.B., and Ráo Sáheb Mádhavlál Harilál Desái, B.A., Principal, Training College, for some time visited the outskirts of the city and gave relief in the shape of breads, etc., to famine-stricken people.

The Missionaries also did much charitable work here.

Thus it will be seen that there is scope for the extension of the use of non-official agency during famines.

JOSEPH BENJAMIN.

Ahmedabad, 17th January 1901.

MR. W. H. WHITE, SUPERINTENDING ENGINEER, NORTHERN DIVISION.

The President.—When did you join your present appointment?

A.—At the end of May. I relieved Mr. Rebsch. I joined at the period of greatest pressure, although when it was thought the rains were going to fail in June our numbers went up again.

Q.—What was the system in force on your works at that time?

A.—Task work.

Q.—Were you able to make a tour of all the five districts?

A.—No; I only visited some of the most important centres—Broach, Borsad, Kaira Dohud, Panch Mahals and Ahmedabad. I consulted the Commissioner at first at Broach on the situation, and I visited one or two works in the districts with the object of seeing how things were going on.

Q.—What were the subsisting relations with regard to the control and administration of your public works between the Department and Civil Administration of the district? I want to know whether the public works had been given over altogether to your control?

A.—They were under the Collector but the control on the works was under Public Works men. The Collector would say what method to begin work on and the practical working was done by Public Works Officers.

Q.—I understand there was a Civil Officer attached to each work and his duties were to look after the kitchens and poorhouses. Was it also his duty to look after sanitary arrangements?

A.—He was more or less considered to look after them. He would go round and inspect everything.

Q.—I had reason to doubt what the practice was. One witness said yesterday that the Hospital Assistants reported to the Civil Surgeon and the Medical Officer. Was there not a division of authority?

A.—In these things the personality of the people had everything to do with it: a man of standing would practically look after everything. He would not interfere with the Public Works but keep an eye on everything. Where the Civil Officer was a *karkun* on Rs. 15 and the Public Works subordinate was a man on Rs. 100 the latter looked to everything.

Q.—The personal factor came to the front?

A.—Very distinctly.

Q.—And that was as it should be under the circumstances?

A.—I quite think so.

Q.—As to the general administration of relief works you would probably agree with me in saying that it is desirable that proper subordination should be maintained, in theory, at all events?

A.—Yes; within certain limits. Suppose a Collector, who did not know the difference between hard and soft land, were to give a ridiculous task, the Public Works Officer would be bound to remonstrate, but the controlling officer should be the Collector of the district. He should be supreme.

Q.—Then, would you say that if the Collector should be supreme in all matters connected with famine administration the Executive Engineer should be regarded as his assistant for Public Works business?

A.—Yes; with certain freedom of reference past the Collector. A Collector may go wrong as well as other people. I do not think the Executive Engineer should be kept from referring to his own department.

Q.—You think he should be authorized to remonstrate against the orders of the Collector?

A.—Yes; he is a professional man and his opinion must be taken in carrying out the work as to conditions of soil and task work and things of that sort.

Q.—Tasks should be arranged in the first instance by the Collector in conjunction with the Engineer. The latter must not of his own motion lay down tasks, he should consult the administrative officer of the district. Is not that the general rule?

A.—Unless the two officers work together there will be nothing done. But, of course, we have distinct rules laid down in the code as to what the tasks should be.

Q.—These rules are subject, of course, to application according to the time and place and circumstances, and as to these there should be communication between the Engineer and the Collector. Where there is difference of opinion whose opinion is to prevail?

A.—In a professional matter the professional man's.

Q.—What is a professional matter?

A.—He will say what task should be set in view of the quality of the earth, whether it comes under the division of hard, soft or very hard; and the same in breaking stones.

Q.—The opinion of the Executive Engineer should prevail in the apportionment of tasks?

A.—Within those limits. I do not mean to say, for instance, that in a run-down district, where the Collector was of opinion that the people should be treated very lightly, that the Collector would not be the responsible man to reduce the task.

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Q.—Take the case of work visited by the Collector and Engineer. They find the task 120 cubic feet. If the Collector says "I think this is too much, considering the circumstances of place and time, and the task ought to be reduced to 90 feet"?

A.—In that case the Engineer should bow to that decision and if he wants to remonstrate, register his remonstrance at once.

Q.—Why should he remonstrate? What has he got to do with the matter? It is a matter of relief. The Collector is responsible for administering relief. How can the Engineer form an opinion as to what measure of relief the people of that district need?

A.—I should think that as a man used to work he is better able to judge than the Collector.

Q.—That is not the question. You are placing him in the position of the officer who is responsible for keeping the people in good health?

A.—Oh, no. I do not want him to be placed in that position.

Q.—If he considers the task exacted from the people too heavy, would you not say that is the matter for the Collector?

A.—Yes, for decision the business of the Engineer is to carry out the orders given him after registering his opinion.

Q.—Entirely putting on one side any results to be obtained for the work?

A.—He is not responsible. In that case, of course, he simply takes the Collector's orders.

Q.—If you consider the Engineer responsible for the administration of relief, you will never come to any conclusion. There would always be a difference of opinion.

A.—I say those things must be decided by the Collector; but in reducing the tasks in one district you might cause an invasion of people from another district.

Q.—That is an administration matter also, which, if the Public Works Department take to themselves the right to decide, will give them administrative functions?

A.—I don't think that ought to be; because the Collector ought to be generelly supreme. I quite go with that. I only mean that we are to open works and carry them out. As a matter of fact the Engineer's opinion would be worth more than the Collector's in professional matters.

Q.—You agree there should be one head in a district for all matters, because if people differ and they have to refer for orders, great delay follows and the people may suffer?

A.—Certainly.

Q.—Then what we come to is this: that the functions of the Public Works Department are carrying out the duties on the works which are given to them, irrespective of the effects of these upon the district. For instance, if they are told to make a road from one village to another, then the task is laid down as 100 cubic feet; and if they come into another sort of earth where the task should be 70 cubic feet, it would be the duty of the Public Works Department to pay at the rate of 70 cubic feet and to do nothing more. They have the discretion of paying according to the character of the soil, but not to vary the wages or the task.

A.—That is how it has been done.

Q.—Do you claim anything further than that? You agree that would be the function of Executive Engineers to carry out the work under the varying local circumstances according to well-established rules. Beyond that you do not go?

A.—With the exception that he may report.

Q.—He may report to his own department? Quite so. You cannot prevent a man writing.

A.—But there are differences in the methods of classifying soils. For instance, two Collectors in two different districts may classify the same earth as hard and soft respectively. I come round in both districts and I find that owing to this different classification the task is very easy here and very difficult there.

Q.—But there might, say in the Kaira district, be a lot of soft people to deal with, and in the Broach district a class of hardy professional diggers, and if you imposed the same task on both you would practically impose a harder task on the former?

A.—But one of the things I would see would be the class of people who did that work.

Q.—Now you go outside your functions. When you go away from your rule of measurements and classification of the soil and look to the character and physique of the people, you infringe upon the functions of the administrative officer?

A.—I do not think so.

Q.—I am afraid I cannot subscribe to that.

A.—I have held that opinion heretofore, and if I have seen things like that, I have mentioned them to the Commissioner.

Q.—There you are entirely within your functions in reporting to the Commissioner. But would you change it on your own account?

A.—Certainly not. I should recognise him as supreme.

Q.—I do not think there is much difference between us?

A.—I do not think so.

Q.—Are you disposed to think that the tasks imposed by the Code were too heavy or not for the people?

A.—The tasks were about half the normal task of ordinary contract work. Therefore for the labouring classes who were in fair condition they were easy, which was proved by the fact that the great mass of them were maintained in good condition throughout this famine.

Q.—But this earthwork, which you say was easy, was done at abnormal times of the year; you do not ordinarily have your roads or tanks dug in the heat of May or June?

A.—I have carried out a lot of road works before the monsoon.

Q.—Are the ordinary district repairs done in May and June?

A.—Many of them. As Executive Engineer, I remembered tank digging just before the rains.

Q.—What was the value of the work done during the recent famine? It has been pointed out by high engineering authorities that the thing does not really admit of valuation in reference to the work of ordinary years, because it is carried out at a time when it would be not carried out in ordinary circumstances.

A.—That is not my experience at all. I have found we got more work in the warm weather. The hours are longer and the people work more easily than in the cold. The cold shrivels them up.

Q.—Then the professional labouring classes were very easily treated in the famine?

A.—They were properly treated. People are not supposed to be just kept alive and dwindle in strength. They went through in fair condition.

Q.—Do you think the wages were sufficient for that purpose?

A.—Yes; judging by the condition of the people in May and June.

Q.—Were the wages too high for any class of labourers? It has been stated that although they might not be too high for the individual, families were able to earn high wages?

A.—The price of grain was very high. With normal prices the wages would have been too high.

Q.—With grain 16 to 18 pounds to the rupee would the wages be too high?

A.—It depends on the amount of food the people want and are used to. The *Dhars* will keep in good condition on less than a cultivator.

Q.—Do you think 19 *chhataks* was more or less than sufficient for the digger?

A.—Taken generally, a sufficiency.

Q.—The diggers were very rarely women?

A.—Often some of the bigger boys were thrown in with them. Sometimes I saw women digging a little. I should have always questioned the officer if I saw a woman digging.

Q.—The wage for the carriers was 15 *chhataks*?

A.—Yes; female carriers. If some of the men went on as carriers they did a bigger task and took the 19 *chhatak* wage. Sometimes if you had too many diggers you had to put some of the men to carry.

Q.—How did you regulate that? You reduced the number of carriers if a man was made a carrier?

A.—It was according to the length of lead, and we reduced the diggers. With fewer diggers you would have a longer lead.

Q.—At all events, you imposed a heavier task?

A.—Half as much again.

Q.—Was the wage of 15 *chhataks* more than was necessary? Under the Code of 1883 it was 19 *chhataks* for a man, a digger; 14 for a male carrier and 13 for a female carrier. Then under the report of the Commission of 1898 there was a rise; the man and woman carriers were made uniform at 15 *chhataks*. Do you think 15 *chhataks* is necessary for a female carrier or is 14 or 13 sufficient?

A.—I do not think I can give a very good opinion on that. I found the people in very good condition, not fat, on 15 *chhataks*. I should want strong reasons for making a change. I am not prepared to say it would bear reduction, because my standard of famine relief is that it should be good.

Q.—There is a question about the classification of men and women diggers together. Would you pay different wages according to sex in the same class?

A.—Not for the classification I saw, because the man classed with the women was generally a long, lean boy and would not consume more than a healthy woman.

Q.—In ordinary times on your Public Works do men and women get the same pay?

A.—The woman gets less.

Q.—Do you think if a woman was classed as a digger she should get 19 *chhataks?*

A.—No; I think her task should be reduced. By giving her 19 *chhataks* you do not make her as strong as a man. I would reduce the task and give her the 15 *chhataks* wage.

Q.—To what percentage would you reduce it?

A.—I think it works down to 80 feet out of 120. But on a lot of big railway works I have been doing lately, where the people worked when they liked, I have seen women and children working. The men had been digging during the day and at night were taking it easy, and the women were then doing a great deal of work.

Q.—When the men are put with the women in the class II, carrier's class, do you think they should get the same wages?

A.—I must qualify my answer a little in that case, an adult is over 14; the adult boys really varied from 14 to 17, and, I think, judging from those I saw on the works, that the women's wage was sufficient for them.

Q.—Taking a man of 30 and a woman of 25, both in class II, the man not being fit for a digger, would you give them the same wage?

A.—I do not think it is necessary to differentiate because the man takes it easily.

Q.—Your reason is, not because a man requires more than a woman but because considering the work he did, the food was sufficient?

A.—Yes.

Q.4

Q.—Working children are classed between 8 or 12. Do you think a child of 13 or 14 should be classed as an adult? When does a working child cease to be a child and become an adult?

A.—Well, it first becomes a "woman" and goes into the carriers.

Q.—When does it become entitled to 15 *chhataks*?

A.—In this country they are early and precocious; 12 years here is equivalent to 18 in colder countries.

Q.—Is a child of 8 of any use upon the works? Is he not more in the way than anything else?

A.—I have not always found that. On ordinary contract works I have seen children carrying earth in the broken baskets discarded by the adult workers. They like to do it and get a certain amount of work done.

Q.—What food is necessary for a working child?

A.—I should certainly not starve the children. For a growing child 10 *chhataks* is not too much.

Q.—What should be the age of a working child? 8 to 12 or 10 to 14? Do you consider a child of 12 years and three days an adult?

A.—I think they can come on to work at 12, but I think it is more important how soon you bring them upon work. Eight is rather young to put a child to hard work. I should be inclined to raise the lower limit if anything, say to 9.

Q.—There is no objection to your going up to 10 if you wish to?

A.—They can do a certain amount of work at 9, but I should be quite prepared to agree to 10; and I should put the higher limit at 13. Twelve is running it rather close; I should certainly never attempt to go below.

Q.—You are familiar with the intermediate system—payment by results with provision for dependants and children? You have seen both systems; the intermediate and the Code task system—which of these two commends itself to you, when famine is taken in time?

A.—The intermediate; because I would not have a minimum. The minimum is injurious to the conduct and discipline of works in certain classes. I do not consider we ought to have half measures, which the minimum wage is more or less.

Q.—Does it tend to create an inclination to do no more than would entitle to the minimum and even not so much; does it encourage habits of laziness?

A.—Yes; and in this season the people were getting demoralized before the rains came, and when the rains held off there was a feeling of utter despair, not only amongst the people but to a certain degree amongst the officers. And lots of these people, not feeling very well, would get their names put down and do nothing but sit under a tree and lift a basket if the overseer was there. A method of payment by results requires them to exert themselves and tends to preserve a spirit of self-respect and self-reliance among those fit to work.

Q.—You may have a class of people who are not able to earn a living wage though not actually infirm or unable to work. Would you group these into infirm gangs and work them on the Code task with the minimum wage?

A.—I would employ them on camp work; easy work, not digging.

Q.—What wage would you give them, the carrier's wage or the minimum wage of the Code?

A.—I should be inclined to treat them as carriers with the object of getting them into better condition.

Q.—But if it is impossible to do that?

A.—I should give them the minimum of the Code but separate them from the works.

Q.—In the case of not taking things in time, of being rushed by a great crowd of people in an emaciated condition, would you introduce the Code task system which involves the minimum or the payment by results system, adapting the task to their reduced capacity?

A.—I would reduce the task, and raise it as they got used to it, so as to bring discipline in at once.

Q.—One officer has told me that he would introduce the Code task system so as to give himself breathing time to get things into order and afterwards introduce payment by results. But you would introduce payment by results from the beginning, reducing the task?

A.—But I understand the people got the minimum in the first ten days.

Q.—The principle would be the same, because if they got the minimum for doing nothing it will be still more difficult to introduce payment by results.

A.—My idea is that people in a run-down condition but fit to do a little work should be put under discipline, the sooner the better. Feed them well. They want better feeding in that case than afterwards. Therefore I would pay them well and give them light work, increasing it as they got into better condition.

Q.—Have you made out any estimate of the value of the work done compared with what it would be under ordinary circumstances?

A.—I have not got full figures and it varies in different places. The best results we got were probably 6 per cent. in Ahmedabad, but in other places we did not get 20 per cent.

Q.—Sixty per cent. would be quite a record I should say. Did you get the quantity of earth excavated and metal broken and take your payments and compare the gross cost with a similar amount of work done in ordinary times?

A.—Yes.

Q.—Do you include the cost of establishment?

A.—No; because it is more in famine work than at other times.

Q.—Do you include the cost of hospitals and poorhouses and gratuitous relief?

A.—Everything of that sort.

Interpolation by Mr. Ferdunji, Tarapurwala.—It does not include the gratuitous relief given by Civil officers, only the expenditure in connection with the Public Works Department establishment, hutting, tools and plant, sanitation, hospitals, but not the Hospital Assistants.

The President.—We have been told that in some cases you were taken unawares; you were not by any means prepared for the numbers that came upon you in the matter of provision of works, tools, plant, establishment and so on. Did you find anything of that sort when you were there? We had it from Mr. Rebsch, who had to deal with these things.

A.—I found only one case in which we were rushed rather in July in Borsad, owing to arrivals from two Native States. We ran short of establishment, but it was very soon added to.

Q.—Was the establishment with regard to quality all that you wished?

A.—Oh, no; we had to take what we could get. One of the weak points is the difficulty of getting establishments.

Q.—Did you always strive to have a responsible man on Rs. 150 or Rs. 200 over your works?

A.—On large works, yes.

Q.—Your works were subdivided into charges of say 5,000, as has been done elsewhere?

A.—No; there was simply a subdivision of works.

Q.—The number might run up to any number of people? When it got beyond control you used to open another work?

A.—Yes.

Q.—And when cholera broke out?

A.—Cholera broke out before I took charge.

Q.—If you had had your works divided into small bodies of 4,000 or 5,000, with a complete establishment for each, you would have found them more easy to handle. Would you be disposed on a future occasion to create an establishment like that?

A.—I think I should.

Q.—And payments are also a matter of establishment. Provided you could do it, are you in favour of daily measurements and payments or weekly?

A.—If you have the establishment, daily; but in practice you cannot commence payment until the work is done, when the people should be going to take their food.

Q.—Could you not pay at 12 o'clock on one day for the previous day?

A.—That would prevent people going to their food and rest.

Q.—For twenty minutes?

A.—It would not work in that way. I consider it would be best to have bi-weekly payments, with two half holidays and no Sunday rest.

Q.—Did you try that system?

A.—Yes; in one of the Native States. It worked fairly well. We stopped on pay day at 11 in the morning. As a rule, the payments were done before evening.

Q.—How many people had you on works where this system was employed?

A.—There was a work in Deesa which varied from 7,000 to 10,000. The payment took quite three hours, but the establishment was more or less short.

Q.—What establishment had you?

A.—The work was carried out by the Civil authorities.

Q.—The quickness of payment would depend upon the number of substantial jamadars and men of that description?

A.—We had *muqaddams*.

Q.—No. *Muqaddams* are gangmen, and the jamadars would be over say 10 gangs, like *mistris*. If you had a system like that, then when the measurements are handed in the cashiers make out for the jamadar's charge the amounts to be paid. These would be put in little bags, and at 12 o'clock these little bags would be put in a big bag and given to the jamadar, and in the presence of the officer in charge of the works these are distributed to the headmen of the gang. This has been reduced to a science, and I have seen over 10,000 people paid in twenty minutes. For every 5,000 people you have a *naib tahsíldár*?

A.—A *mamlatdár*.

Q.—On Rs. 100 a month; one Sub-Overseer on the permanent staff, 17 *karkuns* to keep muster-rolls, 70 or 80 mates of gangs, one store-keeper, one clerk, two cashiers, 4 to 10 *chaukidars* for the treasury chests, 4 to 10 sweepers. That was the entire staff. And the marvellous thing is that it was done honestly?

A.—I should be afraid to attempt it here, for individual payments with such a staff but I know a great deal discipline will do.

Mr. Nicholson.—Is 120 cubic feet the task of a digger?

A.—Yes.

Q.—And then it was 71 feet?

A.—He would have to dig and carry that. He would have to lift it up and put it in the basket.

Q.—But I do not think that would make the difference between 71 and 120.

A.—36 is allowed for the motion of lifting the basket.

Q.—Then a normal lead of 50 feet would be practically *nil*.

Mr. Bourdillon.—I don't quite understand how you organize your gangs when you have too many carriers?

A.—We lengthen the lead.

Q.—But how can you give a long lead on a road?

A.—We would select a suitable spot according to the number of carriers. If you cannot get the lead you must reduce the gangs.

Rao Bahádur Syam Sunder Lal.—Did you stiffen the task when the rains came?

A.—Yes.

Q.—Did it have a bad effect on the people?

A.—No.

Q.—Had it the effect of sending people off to their fields?

A.—It might have hurried them a little at the end. There were complaints of not getting labour.

[*Witness put in a statement about tasks.*]

The usual proportion of men, women and working children on works in Gujrat is 2, 3 and 1, so a gang would ordinarily consist of 16 men, 24 women and 8 children; total 48.

According to Table 3 the combined task for this gang for a lead of 100 feet would be $16\times58+24\times38+8\times19=1,922$ cubic feet. To dig this quantity we shall require all the 16 men and a big boy from the carrier class, thus $16\times120+1\times80=2,000$. The remaining carriers, *viz.*, 23 women and 8 children will carry the above quantity thus:—the task for a woman for a 100 feet lead being 74, and that for a child 37, thus $23\times74+8\times37=1,998$.

If the gang consist of say, 22 men, 18 women and 8 children, a lead of 50 feet would suit; thus the men would dig $22\times120=2,640$ cubic feet and the carriers would carry $18\times116+8\times58=2,552$ cubic feet, which is nearly the quantity dug by the men. By Table 3 the task of the gang comes to $22\times71+18\times47+8\times24=2,600$ cubic feet. Suppose a gang consists of 6 men, 30 women and 14 children, a lead of 400 feet would suit.

By Table 3 the task for the gang would be $6\times26+30\times17+14\times9=792$ cubic feet. Now 6 men and a boy from class 2 will dig $6\times120+1\times80=800$ cubic feet, and the remaining workers of class II and III will carry the excavated earth to a distance of 400 feet; thus $29\times23+14\times11=821$ (*vide* Table 2).

Suppose a gang consist of 3 men, 30 women and 12 children, a lead of 1,000 feet would suit.

By Table 3 the task of the gang would be $3\times13+30\times9+12\times4=357$ cubic feet. Now the three (3) men would excavate 360 cubic feet and the carriers would carry the whole quantity to a distance of 1,000 feet; thus $30\times10+12\times5=360$.

Suppose the lead on a work was 200 feet throughout, the gang consisted of 16 men, 24 women and 8 children, it is evident that the lead would not suit such a gang, and so the question how the gang is to be tasked arises.

It can be done in the following way:—

By Table 3 the task of the gang for a lead of 200 feet would be:—

$16\times41+24\times28+8\times14=1,440$ cubic feet. This would require $\frac{1440}{120}=12$ men only to excavate, and the remaining members of the gang would carry thus:—

(By Table 2), $4\times64+24\times42+8\times21=1,432$.

Suppose the lead throughout was 50 feet only and the gang consisted as above of 16 men, 24 women and 8 children. By Table 3 the task of this gang would be:—$16\times71+24\times47+8\times24=2,456$ cubic feet. To dig this, in addition to the 16 men, we shall have to employ 7 big boys or strong women from the carrier class to help them in digging.

Thus the excavation will be:—

$16\times120+7\times80=2,480$ cubic feet, and the remaining members will carry the earth to a distance of 50 feet, thus:—

$17\times116+8\times58=2,436$ cubic feet.

Thus by a little manipulation the gangs can be so tasked that the digger's work will be nearly equal to the carrier's work.

Taking a child equal to half a woman, the general rule would be as follows:—

Proportion of men to women.	Suitable lead.
1 to 1	50 feet.
1 to 2	150 feet nearly.
1 to 3	200 feet.
1 to 4	300 „
1 to 6	500 „
1 to 10	800 „
1 to 12	1,000 „

Mr. W. H. WHITE.

Replies by Mr. W. H. White, Superintending Engineer, N. D., to the questions drawn up by the Famine Commission.

N.B.—I. Numbers of questions corrected from those in *Bombay Government Gazette*, Part I.

II. Questions which can best be answered by Civil Department have been omitted.

Question 8.—Earth-work—generally piece-work and distance from home.

9.—Badly in Gujarát, as there has been no famine in it for many years, and slight distress is not enough to educate us to deal with a real famine of both man and beast in the rich soft country of Gujarát.

(*a*) Many were; a few.

(*b*) No; no special lists.

10.—Large works. Not that I know of.

14.—Irrigation wells are possible more or less in all the districts. Water from surface varies very considerably and roughly may be taken from 20 to 70 feet. These depths were probably increased by the failure of 1899 monsoon. They are certainly in some districts abnormally deep from the surface this year. The remainder of the question can best be answered by Revenue authorities.

15.—Generally speaking Local Boards works were first started under Civil agency.

16.—Tasks were more or less based on the Famine Code. No.

17.—More or less. Yes; yes; yes, included in week's earnings generally.

18.—Influx of people for relief.

19.—In certain districts they started with a few small works but practically large ones came on at once.

20.—Public Works Department. No, no. I believe not. Yes.

21.—No. Numbers on works varied considerably from a few thousand to over 20,000 as time went on and numbers for relief increased. No maximum was laid down. Drafting to other works.

22.—Each *work* had more or less its own establishment. Details varied and will be given in Executive Engineer's replies. To suit locality and circumstances.

23.—Yes. Not so far as I have heard. At times—yes, in most cases, but there were cases where people went to their homes or camped in villages.

24.—Must depend upon density of the population and class of people. In places in Ahmedabad and Kaira, where the population is dense, 10,000 people came in from a very small area; while in the Panch Mahálś a whole táluka would not supply them. Varied much according to class of people, but 15 miles might be taken as a limit generally.

25.—No. Professional and setting out and fixing tasks, etc.

26.—Yes; from Revenue kárkun on Rs. 15 to Staff Corps and other officers on Rs. 500 and upwards according to rank and standing. Government Circular No. 632 of 3rd February 1900 was generally followed, but when the Civil Officer was a senior man he more or less controlled matters. The Civil Officer had full power to check, note or report anything he wished.

27.—No; with the Public Works representative under reference to his Executive Engineer, if necessary.

28.—Differed on different works and in different districts, but 50 was the generally accepted gang. No great gain was noticed from efforts to secure village or family groups.

29.—As far as possible that prescribed in paragraph 445 of Famine Commission Report of 1898. No departure was found necessary except in the Mahâls, where a slight alteration was made to meet local conditions.

(*a*) It was a necessary evil.
(*b*) It effected a questionable economy.

30.—A distinction is certainly necessary in classification of men and women, and also in their wages. The Code classification was adopted.

31.—Piece-work tried in places for short periods at first, but practically the Code system was quickly introduced all over. No. No.

32.—Yes. There is such a large "if" in the second portion of this question that it is difficult to answer, but effectual relief can certainly be afforded provided the payments are liberal enough to keep the people in health and strength and the work of a class on which they can get "results" to earn the required wage; but many classes, such as shepherds, etc., simply cannot do half an ordinary task at digging or earth-work, which are the general works provided; and will run down and get emaciated on a "task" scale for "payment by results" which the Koli or Dhed will do with the greatest ease. In my opinion no hard and fast rule can be laid down to meet the question.

33.—Will be best seen from the replies of the local officers; No, except for emaciated people and old and feeble who are specially treated; No; Generally leniency; Low earnings, epidemic of cholera, etc., and inability of some classes, such as Grásias, Pátidárs, Burwáds, etc., to cope with the tasks.

34.—Adequate. Those who could and did work kept in good condition on it. I have heard of a few cases, but certainly they did not do so generally, though I believe there were some of cases where families with certain means still in their possession sent a few members to the relief works to earn the daily wage for benefit of the common purse: this more generally when works were close to villages where the family lived. Yes, I believe so as a rule—there may have been early exceptions. When the works were well in hand there was little or no difficulty in getting change.

35.—Yes. Some of the workers could earn sufficient to support themselves for a rest-day, but the general mass either could not or would not do so. A rest-day wage would appear necessary, but its form is open to question.

36.—Yes. Fining should be down to the penal wages—there is no use in half measures; either the people are fit to work and should do so, or they should be provided for separately under special rules and supported on a different principle.

37.—No; piece-work was tried at the outset I believe, after that a minimum was fixed which was above the penal. I think not, though the work done often only represented it.

38.—Weekly as a rule, but in some districts bi-weekly and even daily payments were found necessary. I prefer bi-weekly payments with two half holidays.

39.—Daily for the first week or ten days as a rule. Not to my knowledge. The Bania was careful not to make bad debts, and as he fixed his own sale price, got *cash* payments, having Government practically as Paymaster, must have made a very good thing out of the famine. I consider one of the weak points in the famine administration is the way in which Government are at the mercy of the Banias.

40.—To the individual as a rule, and this is preferable.

41.—See Executive Engineer's replies.

42.—See Executive Engineer's replies; paragraph 208 generally, sometimes modified.

43.—Maximum wage was equivalent of 19 chatáks of grain for male, 15 for female and 10 for children. Children and weakly persons capable of work were as a rule allotted light duties about the camp, or on bunds of tanks or embankments in breaking up clods or levelling down the earth-work generally. Neither task nor piece-work, but simply daily labour on minimum under supervision of mukádams.

44.—No.

45.—Rough muster rolls were kept up as a rule. From these, Code task regular forms could be easily prepared.

46.—Revenue authorities. The cheapest as a rule excluding Bavata and Kadra. Yes.

47.—See replies from local officers.

48.—The Local Government. Collectors and Commissioner can best reply to latter portion of this question.

49.—None till towards rains when people were encouraged to get to their homes, and to do so in some cases small village works were used with success.

50 to *57.*—These were carried out under Civil agency with perhaphs some slight assistance occasionally from the Public Works Department. The works as a rule were village improvements, generally tank-digging, and questions about them can best be answered by the Civil authorities.

58.—I have formed some opinions on the subject but have not time to put them in proper form.

59.—There are some aboriginal tribes in the Division and they were found most difficult to deal with. The local authorities can best reply to the detail questions.

90.—Yes, and largely in certain districts. Famine.

91.—Relief was never excessive though cost may have been so, and was only defective in a few cases through fault of the people themselves. Condition of the people. Refusal of people to come on works till very late and their inability or refusal to work.

95.—Yes.

99.—Very slightly. Measures were taken for good and adequate water-supply with success. Yes, during the cholera epidemic every second or third day as a rule.

100.—Sanitary measures were sufficient; see local officers' replies for details. Civil officers.

103.—Yes. Impossible to say with any correctness but certainly very large in some districts.

106.—Yes, as to *fodder*, not as to grain. The Banias had laid in large stocks early in, and even before, the famine, and it would be interesting to know the difference of price they laid in their stores at, and sold them at.

108.—Not till after the rain fell, and then only in few places, and for a very short time.

110.—No.

111.—No radical departure, but slight modifications, such as introduction of penal wage. Yes.

112.—Yes. Not under Public Works Department. Not at the moment.

115.—A very large question to which I am unable to reply offhand.

W. H. WHITE, C.E.,
Superintending Engineer, N. D.

Extract from the letter from Mr. W. H. White, Superintending Engineer, N. D., No. 233, dated 12th January 1901, forwarding the above.

I find a difficulty in replying satisfactorily to many of the questions as it is impossible in my opinion to generalise for the whole famine area of Gujarát. The people, their habits, strength and stamina, capacity for endurance and power of living on reduced or poor food, as also the unfitness of some for the ordinary class of labour provided on relief works, differ so much that I consider any attempt to generalise may simply lead to wrong conclusions, and it is better to weigh the evidence of local officers of each Collectorate who will be able to testify to the conditions and difficulties of their several districts, than attempt at generalisation for the whole Division.

With these views I refrain from attempting to give detail answers to questions of which the replies in my opinion must vary from different districts and confine myself to giving such information as my personal experience enables me to speak upon. Further, I have to point out that I did not take charge of the Northern Division till May 24th, 1900, long before which all work arrangements and systems had been introduced. I carried on a "going concern" with such action as became from time to time necessary.

MR. J. MOLLISON, DEPUTY DIRECTOR OF AGRICULTURE.

The President.—Are you acquainted with the method of keeping land records?

A.—No.

Q.—Are you prepared to speak for the system of settlement?

A.—No.

Q.—Nor the subject of the incidence of land revenue on the soil?

A.—Except in so far as I have become more or less acquainted with it in making crop experiments and in analysing the reports submitted.

Q.—Certain statements have been prepared as to the incidence of land revenue on the soil of the various districts; the general result is to show that the assessment presses much more lightly on the Deccan districts than in Gujrat. Is that your experience?

A.—I should not put it in that way. The percentage works out in the Deccan to a smaller figure than in Gujrat unquestionably; in the Southern Maharatta country the incidence of the assessment on the gross produce is less than in Gujrat.

Q.—But it would not follow that the margin of profit of cultivation in the Deccan is greater than in Gujrat?

A.—No; the reverse.

Q.—You are prepared to say that although the incidence of the assessment on the soil works out at a higher percentage in Gujrat, yet the profits in Gujrat are higher than in the Deccan?

A.—Yes; taking the district as a whole, certainly.

Q.—Do you know Gujrat?

A.—Yes; I don't know the Panch Mahâls very well.

Q.—Would you say that the Panch Mahâls is a less productive country than Kaira or Surat or Broach?

A.—The cultivators in the Panch Mahâls are inferior. The district is not so well cultivated as other parts of Gujrat. The incidence of assessment in the Panch Mahâls is much less than in other parts of Gujrat. The district is not fully settled. The assessment is low owing to the poorness of the cultivators and inferiority of cultivation, not owing to the poorness of the district.

Q.—Do you yourself think much precision can be attached to crop experiments, as indicative of the productiveness and character of the country?

A.—No; as now carried out, I do not attach much importance to them because some of the officers who do the work have not the experience necessary to select average crops.

Q.—Are they a rough indication?

A.—Yes.

Q.—Do you think the profit in Gujrat to a fairly good cultivator is higher than in the rest of the Presidency?

A.—Yes; decidedly so.

Q.—To what do you attribute the cause of so severe a famine in Gujrat?

A.—For one reason Gujrat is not used to famine or scarcity. Even in an ordinary year in the Deccan the people are pinched and they are inured to it, and so they do not feel the pinch in the same way as the people in Gujrat do. Gujrat people are more used to luxuries and are softer altogether; they are not used to meeting a calamity of that sort. I don't think that the character of the assessment has anything to do with it.

Q.—Either in the Deccan or Gujrat?

A.—No.

Q.—Is there much indebtedness among the cultivators?

A.—I am not in touch with the people like a Revenue Officer, but it is commonly believed among Revenue Officers that the agricultural classes are very largely indebted.

Q.—You are not in a position to speak with first-hand knowledge?

A.—No.

Q.—Have you made inquiries into the mortality amongst the cattle in Gujrat or the Deccan?

A.—Returns are made to the Agricultural Office through the Collectors and through subordinate Revenue Officers annually; the returns are before you. The loss that is shown in these returns does not represent the true mortality, particularly in Gujrat. The figures show 1,800,000 less in June 1900 than in June 1899; I don't know exactly when the census was taken; but between the time the census was taken and the end of July a good many cattle died, not nearly so many in the Deccan as in Gujrat.

Q.—There was less scarcity of fodder in the Deccan than in Gujrat?

A.—Yes; in the Deccan green grass sprang up in 1900 earlier than in Gujrat. In the latter district rain held off until the very end of July. The change from the dry food in the hot weather to the green grass occasions bowel-complaints and high mortality in ordinary years. In 1900 the motality was greater than usual because on debilitated cattle the change was so severe. Instead of 67 to 69 per cent. the mortality as shown in Ahmedabad and Panch Mahâls the chances are that the real figures are higher. The mortality figures include a proportion of cattle which were useless, derelict, and infirm, and it was just as well they were got rid of. If you go back to June 1896 instead of June 1899, the returns of June 1900 show a decrease for the Presidency of nearly three million cattle during the two recent famines.

Q.—We have been told by a witness that the mortality in Gujrat was something like 70 per cent. of the cattle. Would you be disposed to accept that?

A.—Yes; I would.

Q.—In the rest of the Presidency what percentage of the cattle died during the famine year?

A.—It was not as high as 70 per cent., though Khandesh was rather high and Nasik also; generally throughout the Deccan there was forest grazing and on account of the hardiness of the cattle they did not feel the pinch like the Gujrat cattle, perhaps 20 per cent. for the whole of the Deccan including the Southern Maharatta country was all that was lost.

Q.—Have you travelled much in Gujrat; are you familar with the habits and customs of the people?

A.—No, I could not say that I am. I am familiar with the cultivation and the crops, that is my business.

Q.—Do you think there is a future for irrigation in Gujrat?

A.—Unquestionably a great future; provided the people have means of their own to dig wells or provided they get money in some way.

Q.—Does irrigation in the future depend more on wells than on canals?

A.—Yes.

Q.—In a famine year?

A.—In a famine year there is no water in the canals.

Q.—A considerable portion of Gujrat is black cotton soil, is it not?

A.—No, a small proportion is deep black cotton soil. The deep black cotton soil exists mostly in the Broach district.

Q.—Is well irrigation suitable for the black cotton soil in Broach?

A.—No; the soil is too deep and too retentive of moisture. The under-layer is not porous. That combination of soil above and sub-soil below is unsuitable for irrigation. The land would under irrigation become waterlogged. That statement only refers to Broach. It does not refer to shallower black soil in other parts of Gujrat or to the deep alluvial sandy or clayey loam soils which are found in extensive tracts in Gujrat and are eminently suitable for irrigation.

Q.—Are you of the opinion that irrigation can be practised without manure?

A.—It is impossible. On the very rich alluvial soils of Kaira and Ahmedabad, which are practically unchanged to a depth of 40 feet, I am not sure that you could not go on for a term of years without manure; but in ordinary circumstances, unless the crop is liberally manured, irrigation cannot pay.

Q.—We have been told that the cultivators are very largely in debt in this district; would it not be difficult for the cultivator who is in debt to increase his expenditure and build a well and provide the materials for irrigation?

A.—Yes, no doubt; at the same time if Government are prepared to be liberal I cannot see any better opening for lending money; it is absolutely secure; it is a preventive against famine. If it is advanced to the right sort of people, it would unquestionably do a great deal of good. But as long as people generally are in the hands of money-lenders, as they are now, I doubt whether without Government assistance there will be any great advance in well digging,

Q.—Have you noticed any progress in well irrigation in Gujrat?

A.—I have noticed it since the revision of the survey; the rates are fixed for 30 years; a certain amount of assessment is made upon the sub-soil water condition; when the people found that there was absolute security, that there was to be no enhancement of assessment for 30 years in Gujrat, they began to be very active in digging wells.

Q.—Have you reason to believe that the stimulus of well irrigation was afforded by the policy of taxing sub-soil water?

A.—No, I should rather say that it was the security of tenure at a fixed rate for a definite period.

Q.—Are you able to give the Commission any information on the subject of the suspension of the Government demand in years of bad crops? Would it be a politic step and beneficial to the people in years of short stocks to suspend a portion of the demand which may or may not be remitted?

A.—I should say that where the condition of the crops was such in any portion of the district that it was advisable for Government to advance *taqávi* for the purchase of fodder or for the deepening of wells, it is absolutely essential that assessments should be suspended. Where the conditions require the help I have indicated, the conditions are such that suspensions should be made.

Q.—A considerable volume of evidence has been given to the Commission that the suspension of revenue demand should depend upon the character of the holder of the land, it has been said that where the true holder is a *bania* or money-lender, suspension should not be given?

A.—No, certainly not; I should squeeze every pie out of him.

Q.—Another view put before the Commission is this that it is undesirable to differentiate in a matter of that sort, because by differentiating you practically hit the actual cultivator. If you recover in a year of bad harvest from the money-lender he will put that down to the debit of the cultivator, and so the cultivator is hit?

A.—Yes; in a particular year the *bania* has to pay it out of his own pocket; but he cannot take blood out of a stone.

Q.—He may. If you have an eight-anna or six-anna crop over a large tract of country, the *bania* would be able to recover some of that from the actual cultivator and so put the actual cultivator into deeper difficulties?

A.—I am not sure that I should advocate suspensions of revenue in the case of an eight-anna crop.

Q.—Would you do it in the case of a four-anna crop? Opinions seem to agree that that would be the line. In such a case as that, if you don't suspend in the case of a *bania* you will bring pressure to bear upon the actual cultivator?

A.—That is quite likely.

Q.—In such a case would you be inclined to suspend the revenue in the general interest of the country?

A.—The *bania* should be made to pay. I do not think the man who has got into his clutches would be any worse off.

Q.—But there are a number of men who are only to some extent in the clutches of the money-lender, and such men as that will have to go further into the mire of debt if they are called upon to pay the full assessment?

A.—I should still prefer to squeeze the *bania* and try, if possible, to get the tenants by Government assistance out of his power, and prevent them by hook or by crook from borrowing money on the land.

Q.—Can you suggest any means of preventing a man who wants money getting it from the man who wants land?

A.—I should prevent the cultivator using his land as a security.

Q.—At all events you would in no case be prepared to exempt the *bania* or to class him in the same category as the cultivator for the purposes of suspensions?

A.—No.

Q.—You would be in favour of a liberal system of *taqávi?*

A.—Yes, unquestionably; for particular purposes.

Q.—With your experience among the people do you think there is any possibility of establishing mutual assistance in the shape of village banks?

A.—I have no experience; I should doubt if it is worth while making any such attempt.

Mr. Nicholson.—Is that your deliberate opinion that you would stop the *rayat* from using his land as a security for debt?

A.—It is a suggestion. I know the trouble that occurs, how the whole outturn of the Presidency is very much affected in ordinary years on account of the indebtedness of the people. They are not in a position to cultivate to the best advantage.

Q.—I think you said 70 per cent. of the cattle were lost in Gujrat; that includes a percentage of useless cattle, does it not?

A.—I should say about 10 per cent., not more.

Q.—The valuable cattle lost is something like 60 per cent.?

A.—Yes.

Q.—I understand a Gujrati's wealth is bound up in his cattle?

A.—Yes.

Q.—And, as a matter of fact, I suppose a large proportion of the breeding cattle have disappeared?

A.—Yes.

Q.—Consequently the people have lost actual wealth measured by crores of rupees, and it is a loss which cannot be made up for 10 or 12 years to come?

A.—We are importing cattle.

Q.—Still you will have to import a great deal before that can be made up?

A.—Yes.

Q.—You consider that the loss of cattle in this famine is, economically speaking, perhaps the most serious feature of the famine?

A.—Yes; very much is that the case in Gujrat.

Q.—I want to know by what means we can avoid that in the future or make it up to some extent. Will you say what were the steps which were taken to prevent loss?

A.—The forests were opened, cattle were transferred to the forests, fodder was imported cattle camps were opened, and fodder crops grown.

Q.—Will you tell us where the weak points lay? Would you open the forests to indiscriminate grazing?

A.—No, not in Gujrat. The chief reason of the high mortality of Gujrat cattle in the Thana forest was the change of food and change of other natural conditions to which these soft cattle were accustomed.

Q.—Change of water and change of climate?

A.—Yes.

Q.—Is it not also a reason that by turning the whole mass of cattle into the forests the amount of grass which is available is exhausted at an early date?

A.—I do not think that was the reason for the high mortality among the Gujrat cattle which were sent to distant grazing grounds.

Q.—It is in evidence. Is not this found to be the case elsewhere?

A.—No, I should not say so; but I should put it rather to the fact that the grass becomes inso ferior.

Q.—Then on the whole you do not consider in future years any great service can be done by taking the cattle wholesale to the forests?

A.—Not from Gujrat.

Q.—Would you open the forests in the Deccan?

A.—Certainly I would.

Q.—Would you throw the forest open to the cattle indiscriminately, or would you continue to keep out the worthless cattle?

A.—I should think that a moderate fee would be advisable. Some of our forests are not open. I should like to see more opened.

Q.—But you would levy a fee?

A.—Yes.

Q.—Then in the case of the importation of fodder, which was largely adopted here, do you think it possible to support the cattle of the country by imported grass?

A.—I think that the extended cultivation of fodder crops and full utilization of all home resources would be more useful.

Q.—You mean that the grass cut in the forest is very often comparatively useless?

A.—Except in parts where the rainfall is extremely light. Where there is a heavy rainfall the grass is spoilt by September-October.

Q.—And the people cut after that date?

A.—It is hardly worth carrying any distance.

Q.—So that when added to the immense difficulties of transport the fact is that the stuff imported is hardly worth carrying?

A.—Yes.

Q.—Do you think, as regards the Government entering into the matter of fodder supply, that it is necessary, or would you leave it solely to private enterprise?

A.—Private enterprise would have been uncommonly active in the famine year if private enterprise had been backed up in any way by the Railway Companies.

Q.—In fact it is possible the Government enterprise might best be confined to stimulating the Railway Companies?

A.—Yes, such Government assistance would help private enterprise.

Q.—Is there the possibility of substituting oilcake for the maintenance of the cattle in place of grass?

A.—I should say so distinctly. In any season grass of very poor description sells at a high price, particularly at all populous centres. Various oilcakes can be obtained at—compared with grass—comparatively cheap rates. The feeding values of the various oilcakes are infinitely greater than that of ordinary samples of dried grass.

Q.—So that it is extremely economical both to import the oilcake largely and to trust independently for the importation of grass?

A.—Certainly.

Q.—In that way you would reduce the difficulty of a certain quantity of food bulk for bulk than the grass?

A.—Yes, that extra feeding added to the resources of the people would be infinitely more useful.

Q.—So that in that way the rolling-stock might be economised?

A.—Yes.

Q.—Can such cake be procured to any large extent in the country?

A.—Yes, to a large extent at very cheap rates in certain districts where oilseeds are extensively grown. In ordinary years the demand in these districts is limited and the prices are very moderate.

Q.—Foreign cake, I suppose, could be largely obtained?

A.—No oilcake is imported into the Bombay Presidency from abroad. Oilcakes could be got from other parts of India. Linseed-cake is exported to Europe from Bombay in considerable quantities. Other oilcakes are also exported to a small extent; but are not well known in European markets; therefore their prices in Bombay are low. Linseed-cake has a high reputation for export, therefore its price in Bombay is high—Rs. 70 to Rs. 80 per ton. An equally good feeding cake, such as sessamum, can usually be bought at half the price of linseed cake. A cheap oilcake can be economically transported long distances by rail in a famine year.

Q.—Now, with reference to your cattle-camps, I think you are of opinion they could not be extended?

A.—There are not the means for sufficient direct supervision.

Q.—Therefore the number of cattle that could be saved at such camps would be very limited?

A.—If a cultivator of experience or an experienced village officer of good agricultural caste would work for Government in the same way as for himself, there would be no particular difficulty in managing numerous cattle-camps.

Q.—And the association of unofficial agency might possibly be able to do something?

A.—Unofficial agency might possess practical experience; but without trained supervision or supervision of a practical kind it is impossible that a large number of Government cattle-camps can be successfully managed.

Q.—Would it be possible to do anything by small village associations supervised by the Veterinary officers?

A.—If the Veterinary officer is trained well.

Q.—As it is at present, how would you limit the operations of the camps; would you keep them for working cattle or only for milch-cattle?

A.—I should say for the more valuable class of cattle.

Q.—And the cows will take care of themselves?

A.—If the means exist for saving useful cattle of all classes it would of course be advisable to do so. But with limited means good work cattle and good young male stock claim first attention.

Q.—There is another method of assisting. I think you have already told us that it would be of considerable advantage to the country if advances were made. Were they successfully given in portions of the Presidency?

A.—Unquestionably.

Q.—By these grants of *taqávi* was the fodder supply of the country materially increased?

A.—Very materially.

Q.—Now, the cost of digging a *kachcha* well would be how much in this place?

A.—Mr. Seddon told me that he advanced Rs. 15 per *kachcha* well in the Panch Mahâls. That amount was sufficient for digging a well through soft alluvial soil. Rs. 30 were sufficient for digging a *kachcha* well and fitting it with leather bag (*kos*) and rope.

Q.—With that, what area would the people be able to irrigate?

A.—It would in the case of many *kachcha* wells be possible to work two leather bags. In sandy alluvial soils in Kaira and Ahmedabad each bag would probably irrigate about two acres.

Q.—Then you could irrigate four acres from the well?

A.—If it were a good one.

Q.—Will you tell us how many tons of food would be taken per acre from the area commanded by such wells?

A.—In Gujrat less than in the Deccan. But the kind of *juár* fodder grown in Gujrat is very much superior in quality to that of the Deccan. A good crop of Sundhia *juár* in Gujrat would yield something like 6,000 lbs. of dry fodder per acre, *i.e.* nearly 2½ tons of dry fodder for each crop.

—*Q.*—So that one of those wells would produce during the season—from September to June—what amount of dry fodder?

A.—20,000 lbs. or more per leather bag (*kos*) from different patches of ground commanded by one well, from three crops grown during the season.

Q.—So that one could get 20 tons of fodder?

A.—Yes, from a well with a fair supply of water, but not from the same patch of land.

Q.—And that fodder would be worth at Rs. 30 a ton = Rs. 600?

A.—Yes.

Q.—Then you think the granting of advances would be an eminently suitable way of increasing the fodder crop?

A.—Yes, I do not think you can go too far in giving *taqávi* provided the people are the right sort of people and the land the right sort of land.

Q.—You would also advocate that *taqávi* as a rule should be given deliberately during non-famine periods so as to meet the difficulties of the famine?

A.—Yes, certainly; particularly in the Deccan. Money advanced in a famine year for well construction in the Deccan after October-November would be practically useless. Wells cannot be dug through *murum* and hard rock in time for successful irrigation after November-December.

Q.—In the parts of the country where these wells are suitable, why is it that they do not exist?

A.—But they do exist.

Q.—But there seems to be a very large scope for their development?

A.—Only well-to-do cultivators make wells. Poorer men have not the means. The cost of constructing a *pakka* well in the deep alluvial soils of Gujrat is a matter of Rs. 1,200 or Rs. 1,500.

Q.—Would it be possible for the Government to dig wells and obtain recoupment?

A.—I have thought of that. A trained establishment would be necessary for supervision.

Q.—You are of opinion that if there were a trained establishment, it would be an advisable way of spending Government money?

A.—Yes.

Q.—We were told that in a certain *taluqa* there were very many thousand acres from which grass could be obtained; in such a case would it not be well to cut the grass and store it?

A.—Yes, this can be done; if you cover it with corrugated iron, so as to keep the rain off it.

Q.—As regards the fodder crops, do you think they could be more developed on the black soil as in the other parts of the country?

A.—There is no better fodder crop than the *juár*.

Q.—But I am asking whether in any black soil parts of India it would be possible and advisable to grow fodder crops for the purpose of cattle?

A.—Where fodder fetches a good price the *juár* crop is already grown for fodder.

Q.—Is there any other method in which you think the fodder supply of the country might be developed?

A.—No.

Q.—Do you think that fodder hedges might be grown?

A.—Yes; that might be done.

Rao Bahádur Syam Sunder Lal.—Talking about hedges, do you think prickly pear could be used for hedging purposes?

A.—I think the land could be more profitably occupied. I know the experience in Madras in feeding prickly pear to cattle in famine times. I have tried prickly pear as fodder for cattle. Starving cattle can be kept alive on prickly pear if it is supplemented by a small ration of good dry grass or other food.

Q.—You refer in your written statement to land relinquished in the Ahmedabad district. Have there been many relinquishments?

A.—I am not aware to what extent.

Q.—On what account?

A.—I am not sure; but there is a good deal of waste land and unoccupied land that cannot be occupied with advantage.

Q.—Could not these lands, which have been thrown up, be utilized for growing fodder?

A.—They would grow *babul*.

Q.—Could they not be used for growing grass?

A.—They are of a very light sandy character.

Q.—Your estimate of a good sugarcane crop is about Rs. 600?

A.—Yes, in the Poona district, where the cultivation is very advanced.

Q.—And in this part of the country?

A.—I do not think the crops are on an average so good.

Q.—What is the average outturn of the sugarcane crop per acre?

A.—My estimate as entered in the formulæ figures is, I think, 7,200lbs. per acre for the Presidency.

Q.—That comes to how many rupees per acre?

A.—It varies with the value of *gur*. The price of *gur* in Poona at the present date is Rs. 24 per *pala* of 240 pounds—10lbs. for a rupee.

Q.—What do you think to be the average value of the sugarcane crop?

A.—The average rate of *gur* in the Presidency in ordinary years is about Rs. 16 per *pala*, *i.e.* two-thirds of the present Poona price. The average outturn of *gur* I have put at 7,200lbs. per acre.

No. 81, dated the 16th February 1901.

From—J. MOLLISON, ESQ., M.R.A.C., *Deputy Director of Agriculture, Bombay,*

To—*The Chief Secretary to the Government of Bombay, Revenue Department.*

IN giving oral evidence before the Famine Commission at Ahmedabad, there were several points which I believe I did not make quite clear. I wish, therefore, to add to the evidence I gave.

2. The Honourable Mr. Nicholson asked me whether I would approve of a scheme for the construction of wells for irrigation by Government agency. My reply was in the affirmative. A simple "yes" or "no" to a question of this sort is not enough. The question requires fuller discussion. I have advocated in my printed note, which is already before the Commission, the need of liberal *taqávi* advances in ordinary years for well construction. There is no doubt that *taqávi* advances are not always spent in the manner contemplated by Government. If, however, a cultivator spends the money in constructing a well in a favourable position, the work will be done cheaper and probably as well as through Government agency. If it is certain that *taqávi* advances for wells are misapplied, then I think Government should undertake the construction of wells in the same way as any other irrigation work. The officer who is entrusted with the work should be instructed to take district by district and mark out the most favourable positions for wells and select such holdings as are owned by tolerably well-to-do cultivators. Only men of this class can, in my opinion, regularly use irrigation water to advantage. I urge that the occupant of the land should be allowed to cart all material and, with his family, do all digging and rough work requiring ordinary labour. The value of such work at ordinary hiring rates to be deducted from the total outlay. The difference to be a burden on the land, recoverable like assessment. Principal and interest to be repayable in instalments during a term of years.

3. I expressed to the Commission the opinion that a stock of grass or other fodder should be saved during years of plenty and reserved for years of scarcity. Such reserves can only be secured from damage by rain in Dutch barns. These could be cheaply constructed with corrugated iron roofs supported on old railway rails. Such barns would protect the stored fodder for years against any damage or deterioration. The grass should be pressed and the bales when stored should be built up one foot clear off the ground on a rough flooring. This will obviate damage by soil moisture, white-ants, etc. The grass on and under the Ghâts in parts where the rainfall is heavy (say over 80 inches per annum) is not worth preserving. It grows very rough and coarse in ordinary years. It seeds early, and before it can be cut as hay has deteriorated to poor fibrous worthless stuff. In the inlands of the Deccan and of the Southern Mahratta country, where the rainfall is comparatively light (about or under 30 inches), the grass in forest *kurans* is much better in quality and is suitable for storage. In Gujrat

there are very large areas of grass land. These were the grazing and breeding grounds. The breeding-cattle are well nigh extinct, and for many years these lands will not be fully grazed. This year grass in very large quantity is rotting on the ground. In November-December grass of excellent quality could have been cut in very large quantity.

4. I suggest that the Military authorities at all military stations should be compelled to have in ordinary years a reserve stock of fodder sufficient for two years. The Military requirements of Poona, Ahmednagar, etc., are a huge demand on the resources of the Deccan in a year of scarcity.

5. The Honourable Mr. Nicholson suggested that in a year of scarcity it would be better to bring supplies of concentrated food such as oilcakes, cotton-seed, bran, etc., by rail to affected districts rather than attempt to bring lighter loads of inferior grass or other bulky fodder. One trainload of oilcake would represent in feeding value many trainloads of inferior grass. Grass in ordinary times is worth in Bombay Rs. 10 per 1,000lbs. First class oilcake can be bought there at Rs. 20 or less per 1,000lbs. and in out-districts at cheaper rates. The cow or buffalo is, however, so constituted, that a bulky food is necessary. We must have in addition to concentrated food a certain amount of grass or other bulky fodder. The cake would be extremely useful as an auxiliary food. I, therefore, recommend local storage of grass in ordinary years and imports by rail of concentrated food into affected districts in years of scarcity or famine.

6. In the evidence which the Táluqdári Settlement Officer gave before the Famine Commission he stated, I believe, that the jama payable by táluqdárs to Government was sometimes more than the assessment which they collected from their tenants, and that the position was no better when táluqdári estates were administered by Government agency. A considerable portion of the area of táluqdári villages west of Ahmedabad consists of waste land which in reality is excellent grass land. Before the famine these grass lands were grazed to a very considerable extent by the cattle owned by Rabáris and Bharwáds, both classes being professional herdsmen. The Bharwáds, especially in ordinary times, were turbulent people. By hereditary right or custom they paid nominal rents for the grazing lands of particular villages and they obstructed extension of cultivation by turning their cattle on to new cultivated areas. They were masters of the situation, and paid the táluqdárs just as *little* as they pleased for grazing rights. The figures worked out four annas or less per cow or buffalo per annum. In ordinary years there was abundant grazing throughout the year. The situation has now changed. The breeding herds are practically extinct. The Bharwád is now meek in spirit. His song is a dirge. The cows and their *backchas* are gone. The grass on the grazing lands is practically all rotting on the ground. A few speculative contractors are cutting the best of it and exporting in bales to Bombay and other markets. Large supplies of grass of excellent quality will for years to come be available for export or for local storage. Much grass which is not of the finest quality will be available also for grazing. In the interests of Gujrat the question arises how can this grazing be best utilized? In answer I put forward a scheme which I hope will prove practicable. I urge that the Bombay Government should through its Agricultural or Civil Veterinary Department buy in other parts of India young male stock of such breeds as are likely to suit the Gujrat cultivator. The chief effort of the Gujrat cultivator has been to save from starvation his work cattle and such young male stock as will grow eventually into good work-cattle. He will not be very hard pressed for work-cattle for a few years; but he certainly will be when the older cattle die if no young stock are in the meantime brought into the country. I would purchase as yearlings or two-year olds the cattle required. A good judge could determine their ultimate usefulness for Gujrat at this age. About 15 could be carried in a truck. An import of say 20,000 annually would not be a very large undertaking. The initial cost of such cattle would be small compared with their ultimate value. Rail charges would, I daresay, mount up high; but we have to face the fact that land is now out of cultivation owing to want of bullockpower, and waste land will increase if there is no effort made to get work cattle into the country. As regards the rearing of imported cattle, I would in the first place castrate them, so that the remaining pure-bred Gujrat cows would not be contaminated. We must maintain the purity of the far-famed Gujrat breed, even though only a trivial number of pure bred cows remains. The work-cattle of Gujrat, which are perhaps the best work-cattle of India, are regularly castrated by the professional herdsmen when quite young (less than a year old). I see no good reason why the operation should be postponed with other breeds until they are three, four, or five years old. The castrated cattle should be put in charge of the táluqdárs or in charge of the Táluqdári Settlement Officer on administered estates, allotting so many cattle per village according to extent of available grazing. The táluqdár to be paid or his estate credited with grazing and herding fees for such Government cattle as were maintained throughout a year. If a táluqdár was paid per annum Re. 1 or Rs. 1-8-0 per head for grazing and herding, his grass lands would yield him much greater revenue than they do now, and I think Government could afford to pay such rates. I have recommended local storage of grass in case a year of scarcity or famine occurs.

7. The Honourable Mr. Nicholson, in casual conversation, questioned me regarding the utility of he-buffaloes for agricultural operations in Gujrat. I explained that they were largely used in the rice tracts of heavy rainfall, particularly in Thana. The bullockpower tillage on such land occurs only during a period of a few weeks in June-July and during the rest of the year the cattle are practically idle, one pair of work-cattle being required for about four acres of rice lands. The grazing in the Konkan is fairly abundant; buffaloes can be kept without much extra feeding during the idle season. The climate suits buffaloes better

than other cattle. He-buffalo calves and yearlings are bought for the Konkan at purely nominal rates in above Ghát and other buffalo-breeding districts. These young he-buffaloes are reared in the Konkan. Some when mature are used as work cattle. Many supply the Bombay market with beef.

8. The ordinary Gujrat cultivator prides himself in possessing well-matched pairs of work-cattle. He would, I think, feel demeaned if he had to use he-buffaloes instead; but if very hard pressed he might take to them. Much rice land in Northern Gujrat lay waste this year. The rain came so late that the conditions for rice were very unfavourable; but in the future without sufficient bullockpower, I fear, the tendency will be to neglect rice beds and devote attention to ordinary dry crop areas. The rice bed requires much labour in a short period. The dry crop tillage is spread over a much longer time and a much larger area can be cultivated by a single pair of cattle. In fact in *rabi* tracts a single pair of bullocks can during the monsoon prepare in the ordinary way for sowing 40 or 50 acres before October. In certain rice land tracts in Northern Gujrat such as Mehmadabad (Kaira district) the cultivators would probably use he-buffaloes if procurable. In any case I think the experiment of buying them as yearlings at nominal prices and rearing them at Government expense on the grazing-grounds of Northern Gujrat is quite worth trying. Losses arising from contagious diseases may be expected; but the Civil Veterinary Department would be able to keep such diseases under proper control.

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Mr. J. W. MOLLISON.

Report by Mr. J. W. Mollison, Deputy Director of Agriculture, Bombay Presidency, with reference to Nos. 66 and 67 of the questions drawn up by the Famine Commission.

In reference to your No. 4111 of 1900, dated 31st December, and subsequent telegram No. 17 of 3rd instant, I have the honour to submit the following report:—

The measures taken in the famine year 1899-1900 to prevent mortality in cattle in the Bombay Presidency may be broadly grouped under the following heads:—

(1) Advances under the Land Improvements Loans Act for constructing and repairing wells.

(2) Advances under the Agriculturists' Loans Act for purchase of fodder.

(3) The importation of fodder into the stricken districts (*a*) from the Bombay forests, (*b*) from Government forests in the Central Provinces, and (*c*) by purchase from contractors.

(4) The opening of forests for free grazing.

(5) The maintenance of cattle camps in Gujarát.

(6) The transportation of cattle from affected districts to forest grazings.

2. The cattle stock of the Presidency decreased during the year 1899-1900 by 1,824,000. This represents a decrease of 23·7 per cent. That decrease does not by any means represent the total indirect loss to the Presidency. The greatest mortality occurred in the Panch Maháls, Ahmedabad, Kaira, Broach and Khándesh. The mortality among cows, buffaloes and young stock was greater than among work cattle. The province of Gujarát obtains its work cattle to a very considerable extent from breeding grounds situate in Native State territory. It is known that the far-famed breeding herds of Kánkreji cattle, bred in Pálanpur, Rádhanpur, Kánkrej, Baroda territory, &c., are well-nigh extinct, and the British districts of Gujarát will certainly not for many years to come obtain normal supplies of work cattle from its ordinary breeding districts. The Deccan districts will suffer in precisely the same way. The best Deccan work cattle are Málvis imported in droves from the Sátpudás in Khándesh and from Holkar's territory, &c., north of Khándesh. There have been large losses in the breeding herds in these parts.

3. The losses in the Presidency proper of work cattle, breeding cattle, buffaloes and young

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stock are tabulated below for each district in round numbers :—

District.	Total number of cattle lost in 1899-1900.	Percentage loss on figures of 1898-99.
Panch Mahâls	224,000	69
Ahmedabad	288,000	66
Kaira	234,000	56
Khándesh	385,000	47
Broach	59,000	44
Ahmednagar	158,000	29
Násik	148,000	28
Poona	92,000	17
Sátára	91,000	16
Sholápur	38,000	11
Belgaum	58,000	10
Surat	30,000	9
Dhárwár	26,000	4
Thána	14,000	3

Kánara and Bijápur are the only two districts which report any increase in the stock of cattle. In Gujarát and elsewhere the losses among plough cattle were to some extent made good by imports of Málvi cattle from Central India, but these imports, though extensive, were trivial compared with the mortality.

4. I believe that the greatest assistance which Government gave towards preventing mortality among cattle was as takávi advances for repairing and constructing wells. The actual figures for the Panch Mahâls and for Poona have not yet been returned. Excluding these the totals for each Division are as under:—

	Rs.
Northern Division	6,04,762
Central Division	11,45,778
Southern Division	1,74,994

In 1899-1900 the total irrigated area of the Presidency declined by 63,000 acres or 6·7 per cent. The well-irrigated area rose from 561,000 acres to 657,000 acres, the increase being 96,000 acres. More than $\frac{3}{4}$ths of this increase occurred in Ahmedabad and Kaira. These districts abound with old wells which are deep and hold an unfailing supply of water and the cultivators helped by takávi advances from Government set themselves early in

the season to dig kacha wells in very large numbers. The cost of digging such in the soft alluvial soil (which extends without any change in character to a depth of 40 feet or more) was trifling compared with the cost of digging through muram and trap in the Deccan. The Gujarát kacha wells gave a full supply of water throughout the season and under numerous wells three crops in succession were grown between September 1899 and June 1900. Sundhia jowár was first grown, then wheat in the cold weather, and again sundhio or chino (*Panicum miliaceum*) in the hot weather. The whole manure supply of the year was available for these irrigated patches and the crops of sundhia jowári were without exception magnificent. The grain of this crop is of trivial value compared with the fodder. In the Deccan as in Gujarát in a famine year the main efforts of a cultivator who owns a well is to grow such crops as are specially valuable for grain and fodder combined. The land under wells in the Deccan is generally that which is naturally most fertile and such land helped by heavy dressings of manure is capable of growing very heavy crops indeed of fodder jowár. The majority of the well-irrigated jowár crops in the Deccan yield over 2,000 lbs. per acre of grain and often over 10,000 lbs. of dry fodder per acre. A good crop of sundhia in the fertile plains of Kaira and Ahmedabad will not yield so much, but the fodder is infinitely superior in quality to any that is grown in the Deccan. I consider that the cultivation of sundhia jowár under wells was the means of saving the greater portion of the work cattle which were saved from starvation in the Ahmedabad and Kaira Districts, and that takávi advances for well construction are of the greatest possible value in a famine year.

5. The amount of takávi advanced to cultivators in each Division for the purchase of fodder are noted below. The Poona and Panch Maháls figures have not been returned and are, therefore, not included :—

	Rs.
Northern Division	2,65,620
Central Division	3,79,197
Southern Division	13,889

Government grass was sold in the Northern Division at Rs. 10 per 1,000 lbs. to *bona fide* cultivators and eventually at Rs. 2 per 1,000 lbs., the Rs. 8 difference being made good to Government from the Central Famine Fund. 1,000 lbs. of fodder, if of good quality, with the other resources which a cattle owner could command at home, went a long way towards keeping alive a big Gujaráti bullock during the period of scarcity; and therefore the takávi advances for purchase of fodder assisted materially in preventing mortality.

6. In paragraph 9 of Government Resolution No. 4064, Famine Department, dated 27th December 1900, the Conservator of Forests, Central Circle, has been called upon to submit a report on the Famine

Grass Operations. He will no doubt deal with the actual quantities delivered and the cost to Government. In respect of Famine Grass Operations the particular points to which I wish to direct attention, are—

(*a*) That the greater portion of the fodder obtained through Government agency reached Gujarát much too late in the season to save many thousands of cattle which would have been saved if it arrived in sufficient quantity earlier and in regular quantities afterwards. For 3½ months up to 13th December the whole rail-borne traffic in grass on the B. B. & C. I. Railway, north to and through Gujarát and south to Bombay, only amounted to 35,000 tons. It is doubtful whether more than 20,000 tons reached the famine-stricken districts of Gujarát during this period. Between the 15th of December and the end of February about 33,000 tons of fodder from all sources were delivered in Ahmedabad, Broach, Kaira and Panch Mahals but chiefly in the two first-named districts. The traffic increased somewhat during the next three months but much too late to save the situation. Many cattle had died. Irrigated crops had been grown to keep alive those which survived and there was by no means nearly such a keen demand for Government grass at Rs. 10 per 1,000 lbs. as earlier in the season. In the Ahmedabad bazár baled grass could have been bought freely at Rs. 8 or 9 per 1,000 lbs. in the middle of May. Up to this time in the various districts of Gajarát about 12,000 tons of grass and other fodder were delivered through Government agency. This quantity if delivered as required through the season was sufficient to keep alive about 25,000 cattle if the owners supplemented the grass by other home resources. Dealers in grass were losing money in May but they had large stocks waiting transport at stations down the B. B. & C. I. line, and if the monsoon had come at the ordinary time these stocks would have rotted at the despatching stations along the Indian Midland and B. B. & C. I. Railways. The imports delivered through Government agency in Gujarát would certainly not have been nearly all sold by the beginning of June unless at the reduced price of Rs. 2 per 1,000 lbs. Rain held off until the end of July; the need for extraordinary fodder supplies for surviving cattle became urgent. The rail-borne traffic in grain was much less than earlier in the season and the Railway Companies were glad to carry grass. Notwithstanding this extra traffic late in the season there can be no reasonable doubt that the fodder reserves of the country were by no means ~~freely~~ exploited simply and solely on account of difficulties of transport by rail.

(*b*) Private individuals who arranged for supplies of fodder early in the season from distant parts were equally unfortunate with Government in not getting such supplies quickly transported by rail.

(*c*) It was commonly reported that trucks for fodder were easier obtainable if Railway officials of subordinate class were bribed.

(*d*) The rolling stock on the B. B. & C. I. Railway and in particular the number of engines were hopelessly inadequate for the fodder traffic and were not sufficient on the Indian Midland Railway. The fodder traffic further suffered because even in bales the grass, &c., was bulky and light and it paid the Railway Companies better to carry dense heavier loads.

(*e*) The Indian Midland Railway refused to carry baled fodder in open trucks, fearing risk of fire. The loads in closed trucks were so light and the Jhansi contractor loaded so carelessly that freight charges from Central India were very high. In some cases the cost of loosely baled grass and of loose karbi exceeded Rs. 30 per 1,000 lbs. landed in Gujarát.

(*f*) The weights as entered in way bills and as charged by the Forest Department of the Central Provinces were found when tested on delivery to be higher in some cases than actuals. A small accountable loss due to dryage, &c., during transit was also shown in the case of bales from the Bombay forests. There were very large differences found in favour of the contractor (Mr. Abbott) between the weights charged for and as tested on delivery.

(*g*) It was observed very early that the fodder supplied from the Bombay forests and by the contractor (Mr. Abbott) did not suit the Gujarát cattle. The contractor's grass and karbi were to some extent inferior owing to damage by rain and coarseness induced by manipulation. A proportion of the Central Provinces forest grass was to some extent spoiled by abnormal rain which fell in January apparently after the bales were pressed. But on the whole the Central Provinces forest grass might be classed as of good quality in comparison with ordinary dried grass in India. Big Gujaráti cattle might possibly have existed on the best of the Central Provinces grass or on the best of Mr. Abbott's karbi without extra feeding, but on Thána, Tapti Valley and inferior Central Provinces grass or karbi they got weaker day by day in the cattle camps. There is no doubt that the majority of the cattle collected in cattle camps would have died on grass alone. The effect of continuous feeding on grass alone was not only reduced condition but also bowel complaints, the most serious of which was impaction of the rumen. The power of digestion of an average Gujaráti bullock was in fact not sufficient to overcome the coarse fibrous character of the grass and inferior karbi. The fibrous undigested material collected as a hard dry mass in the third stomach and stopped digestion altogether. This difficulty was overcome by giving a daily allowance of oil-cake varying from $\frac{1}{2}$ lb. to $1\frac{1}{2}$ lbs. according to the size of the animal. The oil of the oil-cake added nutriment

to the daily ration and exercised a softening effect during digestion on the dried grass. Without cake a big Gujarát bullock could not be induced to eat more than 12 lbs. of dry grass per day. With cake he ate about 15 lbs. of it. I was curious to know the real nutritive value of the grass, &c., as supplied to us by the Forest Departments of Bombay and the Central Provinces and by contractors. I sent samples to Dr. Leather, Assistant Agricultural Chemist to the Government of India. The result of his analysis is given below. I do not quite agree with Dr. Leather in his conclusions. He estimates the various samples as having about half the feeding value of good karbi. I do not think they are worth so much on an average. Mr. Abbott's grass (contract No. 3) and the Thána grass show by analysis that they were most inferior. This was recognized in Gujarát by practical experience. The Thána grass contained more than two-fifths of its weight of crude fibre and sand and 12 per cent. moisture. These constituents have no nutritive value. Considering that a big Gujarát bullock would not eat more than 12 lbs. of grass per day naturally he starved on such stuff. The 1½ lbs. of cake which he was given in addition per day contained nearly more nutrition than the whole of the grass which he could be induced to eat. The Central Provinces grass from Saugor and Jabalpore I considered generally of fair quality and this is borne out by analysis. The Navápur Tápti Valley Railway grass looked good but Gujarát cattle would not eat it. Its analysis is not bad. This grass has a peculiar aromatic smell and the stalks are exceedingly hard and shining and there is no doubt that it was very difficult to digest. Sample No. 6 was damaged by rain. It was "fusty" and therefore condemned.

Samples analysed by Dr. Leather, Assistant Agricultural Chemist to the Government of India.

Results of analysis given in tabulated form.

Composition of 10 samples of grass and 2 samples of bhusa, analysed by Dr. Leather, Assistant Agricultural Chemist to the Government of India.

No.	Samples.	Moisture.	Albuminoids.	Soluble carbohydrates.	Woody fibre.	Mineral matters exclusive of sand.	Sand and silicate.	Total nitrogen.	Albuminoid nitrogen.
		Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1	Grass from Navápur	12·33	2·12	51·28	27·16	2·83	4·28	0·37	0·34
2	Grass from Thána	12·21	1·50	39·13	35·54	4·30	7·32	0·25	0·24
3	Grass from Saugor, Central Provinces.	12·59	2·07	47·89	28·11	2·55	6·79	0·35	0·33
4	Grass from Jabalpore, Central Provinces.	11·78	2·31	43·51	33·66	2·38	6·36	0·37	0·37
5	Grass from Budni, Central Provinces.	11·36	1·31	44·42	35·24	1·09	5·68	0·21	0·21
6	Grass (condemned) from Mr. Abbott.	11·77	1·50	47·59	27·69	2·50	8·97	0·31	0·24
7	Grass good Kulphar	11·89	1·37	49·94	26·86	2·09	7·85	0·22	0·22
8	Bhusa, 1st consignment ...	13·23	2·19	46·53	24·77	8·57	4·71	0·66	0·35
9	Bhusa, 2nd consignment ...	10·07	2·50	41·03	19·82	9·77	16·81	0·50	0·40
10	Mr. Abbott's grass contract No. 3, Bhopál.	10·78	·94	43·92	34·98	1·14	8·24	0·15	0·15
11	Mr. Abbott's grass "Hirania" ...	11·58	1·31	46·33	31·80	2·14	6·84	0·22	0·21
12	Sohagpur grass	10·91	1·37	48·24	32·98	1·54	4·96	0·29	0·22

Dr. Leather remarks that—

"In these analyses the true albuminoids have been determined as well as the total nitrogenous substance. In most cases nearly the whole of the nitrogenous substance existed in the form of albuminoids which is usual in fully ripe and over-ripe crops. I have separated the sand and silica from the remainder of the mineral matters. This, the 'pure ash,' consists principally of phosphates of lime and potash. Of the sand and silica a large part is silica belonging to the plant, and in no case do I think that earth had been deliberately mixed with either grass or bhusa. But earth naturally does get mixed with both, with the former from the air and with the latter on the threshing floor. In sample No. 2 the grass roots held a little earth. Apparently this grass had been pulled up rather than cut. Regarding the feeding qualities of these grasses, they are similar to other samples of Indian grass which have at various times come to my notice. They consist of the refuse stem of the grass after the seed has been scattered and are consequently characterised by a high proportion of the woody fibre with a low proportion of albuminoids. They are worth about half as much as good jowar fodder."

7. I have no figures which indicate the extent to which the opening of forests for free grazing and grass cutting was taken advantage of by owners of cattle. The privilege was a great boon everywhere. The Broach and Surat cultivators got at, I believe, normal cost a good deal of grass from the Dángs. The forest grazing of the Panch Mahál, though very scant, was exceedingly valuable to the owners of cattle of that district. The Panch Mahál cattle are not of the true Gujaráti breed. Many of them are undersized Málvis. Such cattle like those of the Deccan and of the Southern Marátha Country seek industriously for a living and can survive on scanty pickings in fields, headlands, waste places and forest lands. A big Gujaráti bullock would die from starvation in a fortnight under similar conditions. The Panch Mahál District was badly served with imports of grass. The irrigated area of the district, although it increased largely in the famine year, was still small (7,300 acres). The people are poor and the mortality in cattle was great—69 per cent. It would have been still higher if the forest had not been available. I consider the Khándesh cattle mortality figures surprising; 385,000 or nearly half the cattle died. The Khándesh cattle are mostly of small active hardy Deccani type. They are used to privation or scarcity at certain times every year. In a famine year those that are robust and young can subsist under very trying conditions. Many of these cattle are habitually taken to distant grazing grounds in the fair season. It is true that the Sátpuda range was very bare of grass in 1899-1900. But there was

much grass on and under the Ghâts in the west of the district and in the Thána forests. Droves of Khándesh cattle are annually taken for grazing to these parts, and it appears surprising that the opening of forests for free grazing did not help more materially in keeping Khándesh cattle alive. In any case, one fact may be accepted without any reservation, *viz.*, that forest grazing is much more serviceable and valuable for the hardy Deccani and Southern Marátha cattle than for the bigger softer cattle generally found throughout Gujarát.

8. I append hereto two statements marked A and B which show the results of cattle camps. Statement A deals with the numbers and various classes of cattle admitted and shows the losses from various causes. Statement B deals with the financial results. It will be noticed that grass and other fodder is charged for at Rs. 13 per 1,000 lbs. Under circumstances which have been already explained, that price could not have been obtained in Gujarát by sale to ordinary cultivators except early in the season. I do not know what the grass, &c., actually cost Government. I therefore take Mr. Wroughton's estimate of actual cost which he placed before Government when the Famine Grass Operations were sanctioned.

9. Subordinates of the Agricultural and the Civil Veterinary Department were put in charge of cattle camps Nos. 1, 2, 5, 6 and 7. No. 3 camp was excellently managed by Ráo Bahádur Lálshankar Umiáshankar. I lent him the services of a trained mukádam from the Surat farm. No. 4 camp was managed by the late Mr. Manibhái Premábhái, President of the Ahmedabad Municipality. The Broach Camp was capably managed by Mr. P. R. Mehta, M.R.A.C., of the Gujarát Revenue Survey. The Umreth Camp was in charge of a local committee and a paid manager. The Nadiád Agricultural Association and staff were chiefly responsible for the management of the Nadiád Camp.

10. The cattle camps were started as an experiment, the first one at Sháhibág, Ahmedabad, in September 1900. This camp was started too soon before any real pressure was felt by *bonâ fide* agriculturists and cattle breeders in the district. There was at that time in the district large droves of Sindhi and Native States cattle from the north of Ahmedabad. These cattle had practically felt the pinch of famine for two years. They were an unhealthy lot. Many were purchased for the camp for small sums. The change from the green leaves and pickings in the fields to the hard dry fibrous Thána grass caused bowel disorder and other sickness with high mortality. The camp was taken over and put under the same general supervision as other camps on the 20th November 1900. The Pinjrápol accepted a large number of the cattle which were not worth keeping, and afterwards the camp was filled up to its full limit. The whole expenditure up to the 20th November was

met from private subscriptions. The tabulated statements A and B refer only to results after the 20th November.

11. At all the camps cattle of inferior class were admitted but not in large numbers. The cattle admitted at camps Nos. 1, 2, 3, 5, 6 and 8 were superior to those admitted at other camps. At Nadiád Camp there was a large proportion of buffaloes which died in large numbers from debility, particularly towards the end of the season. The management was neither as capable or as careful as at other camps.

12. Three classes of cattle were admitted into the camps:—(i) cattle received gratis, (ii) cattle bought; (iii) cattle received on terms. The latter class were admitted on payment for keep, the charge ranging from Rs. 5 per month for a large bullock down to Rs. 2-8-0 per month for young stock.

13. If I had to do the work over again, I should be more careful regarding all cattle which were admitted, particularly those received on terms. The necessity did not become apparent until the camps had been in existence some time. The poorer cultivators with debilitated cattle made applications for admission first. They came with their cattle long distances, and it was hard to turn them home again to starve.

14. Cattle which were previously fed on green leaves did badly in the cattle camps. The change of food was severe. A good many of these died soon after admission. Such cattle could easily be detected. Their urine was green and the thighs of female and the sheaths of male stock were considerably discoloured.

15. It very soon became evident that Gujaráti cattle are by no means hardy. They bear no comparison with Deccanis in this respect. At all the camps except Nos. 2, 4 and 9, the death-rate was heaviest among newly admitted cattle, the cause being change of food and bowel complaints occasioned thereby. The cold weather had a very debilitating effect on weak cattle, which was counteracted by such shelter as we could afford, and by extra feeding. We found sessamum cake to be the most suitable food for the camp cattle. Concentrated food in considerable quantity was, in addition to the inferior fodder, found necessary for all cattle, but especially for big work cattle and particularly in the cold weather. A big Gujaráti bullock ate about 15 lbs. grass per day with $1\frac{1}{2}$ lbs. cake. Young stock and cows at 8 to 12 lbs. grass each. Salt, as rock salt, was given to begin with; but the lumps were licked away so fast that the cost became considerable. Afterwards ordinary coarse salt was given twice a week in limited quantity with the cake ration.

16. Ailing cattle in the camps required careful attention in the cold weather. The disorders were mostly intestinal. Rinderpest broke out seriously at No. 4 camp. Recovered cases afterwards died from debility. The type of disease was very virulent. Rinderpest of a mild form appeared also at camp No. 2. The cases were isolated and the disease in a declared form did not spread. But many of the cattle had an unthrifty feverish appearance at the time, and there can be no doubt that a mild form of the disease spread through them and deaths recorded as from debility may have been from mild rinderpest. The cattle of Northern Gujarát are apparently naturally immune against rinderpest to some extent, being naturally inoculated by recurring outbreaks of a mild type. The disinfecting power of hot sunshine on the alluvial sands of Gujarát apparently tends greatly to prevent disease from spreading. Such was considered the case in the cattle camps. An outbreak of foot and mouth disease in No. 1 camp was confined to one yard by careful segregation. An outbreak of rinderpest occurred in the Nadiád Camp.

17. The cows in the cow camp, which were entirely Government property, were inoculated against rinderpest with virulent blood and serum by Veterinary Majors Morgan and Hagger. No rinderpest appeared afterwards among these cattle or in any other camp cattle.

18. We had the services of a qualified Veterinary Surgeon for the camps. He was in responsible charge of one camp and visited other camps professionally as required.

19. In my opinion the cattle camps as organized in Gujarát could not have been much extended. I had only a small number of trained men which could be spared for this particular work and such men are certainly necessary for direct supervision.

20. It will be seen from the foregoing paragraphs that there are considerable risks and considerable expense attending the feeding of cattle in cattle camps with the description of fodder supplied to Gujarát by the Famine Grass Operations. As the result of experience gained, I believe now that it would be preferable to sell fodder direct to owners of cattle. Cattle owned in twos or threes in villages undergo less risk of contracting disease than in cattle camps, and could be fed by the owner most economically. He has at home resources which at trifling expense would supplement and improve the grass considerably. There are pickings in the fields, husk of grain, cotton seed, leaves of trees, &c. The efforts of cattle owners in collecting such, in order to keep their cattle alive during the famine, were extraordinary. No other people in the world would have exerted themselves to the same extent and in the same way. The most valuable cattle survived longest. So they evidently got the most

attention. It has, however, been argued in favour of cattle camps that grass, if supplied to an owner of cattle at home, would be used indiscriminately in feeding good as well as inferior animals. This is no doubt the case. But there are drawbacks also connected with cattle camps.

21. The Commissioner, N. D., has informed me that he is reporting fully to Government regarding the results of transporting cattle from the famine districts of Gujarát to the Thána forests. I need therefore only say that the experiment failed because—

(*a*) the cattle were debilitated when they left Gujarát;

(*b*) the rail journey to Thána took in some cases three days and was very trying;

(*c*) the change was extreme from the flat plains and rich fodders of ordinary years of Gujarát to the hilly tracts and poor grass and feverish climate of Thána;

(*d*) the cattle did fairly well in Thána until the grass and other vegetation dried up in the hot weather. Cut grass was provided for this period, but as already shown the Thána dried grass has extremely poor feeding value, and is alone insufficient to keep a big Gujaráti bullock alive for any length of time.

22. As regards transport of cattle from other parts of the Presidency to distant grazing areas, I have no figures to show actual results. But the transport of Deccan and Southern Marátha cattle to accessible grazings has always been at least fairly successful.

A.

Government Cattle Camps.

Receipts and Disposal of Animals.

Nos.	Camps.	Cattle fed for owners at fixed rates.	Cattle purchased.	Cattle received gratis.	Calves born.	Total receipts.	Losses from diseases, ailments and accidents.	Losses from debility.	Strayed or stolen.	Total losses.	Percentage loss.
1	2	3	4	5	6	7	8	9	10	11	12
1	Sábarmati	973	4	...	3	980	26	52	6	84	8·57
2	Sháhibág	442	67	177	14	700	47	113	1	161	23·00
3	Dhuliákot	278	225	217	...	720	16	64	2	82	11·4
4	Saráspur	196	39	332	5	572	33	125	...	158	27·33
5	Cow Camp	...	359	81	14	554	22	6	...	28	6·17
6	Broach	1,080	...	7	...	1,087	28	136	10	174	16·00
7	Godhra	185	14	22	...	221	...	23	2	25	11·31
8	Umreth	638	...	95	...	733	...	116	4	120	16·37
9	Nadiád	34	281	214	8	537	17	387	...	404	75·23

No. 2 Camp.—A portion of the cattle admitted to this camp were an unhealthy lot as explained in paragraph 10 of my report, hence high mortality from debility.

No. 4 Camp.—A portion of the cattle which died from debility were weaklings when admitted, and perhaps should not have been admitted at all.

No. 9 Camp.—Many of the cattle admitted were thin buffaloes which got weaker day by day and died in large numbers towards the end of the season. The management was not satisfactory.

Fam 45—4

Receipts and Expenditure at the Cattle Camps.

No.	Camps.	Receipts.								Expenditure.							
		Private subscriptions.	Government advances.	Sale of skins.	Sale of manure.	Sale of camp fittings and other sundries.	Sale of cattle.	Fees for cattle fed for owners.	Total.	Cost of making camps.	Cattle purchased.	Establishment and herding.	Cost of grass at Rs. 13 per 1,000 lbs.	Cost of concentrated food.	Cost of medicine.	Sundry expenditure.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Sábarmati ...	3,156 6 5	3,691 1 4	77 0 0	400 0 0	238 10 3	2,785 0 0	19,699 12 2	30,047 14 2	353 6 5	13 0 0	1,482 8 10	25,110 2 4	5,126 15 8	63 3 3	118 15 10	32,273 4 4
2	Sháhibágh ...	1,821 9 7	3,313 1 10	180 4 0	396 8 0	119 5 3	7,731 4 0	6,581 8 0	20,113 8 8	389 6 1	2 0 0	2,113 1 10	15,443 13 8	3,647 1 8	140 13 1	139 9 0	21,875 13 4
3	Dhuliákot ...	3,485 7 7	1,715 9 7	87 4 0	500 0 0	775 14 10	4,945 0 0	6,081 10 0	17,599 14 0	203 13 0	388 8 0	1,115 9 7	15,225 13 2	3,207 10 8	151 8 3	333 15 8	20,423 14 4
4	Saráspur ...	2,332 1 6	908 15 5	145 3 9	.....	222 14 6	6,317 0 0	2,016 4 0	11,942 7 2	330 1 8	70 11 6	903 15 8	11,589 8 6	2,199 5 9	205 6 8	118 7 7	15,922 9 4
5	Cow Camp ...	3,124 0 0	321 1 6	11 4 0	125 0 0	83 8 0	9,647 12 0	....	13,312 9 6	561 1 6	6,252 0 0	321 1 6	5,185 10 4	1,227 9 9	27 4 0	135 5 7	13,720 0 8
6	Broach	2,675 0 0	2,379 10 2	131 0 0	30 7 0	355 4 0	170 4 0	17,629 0 0	23,870 9 2	250 0 0	.....	2,351 8 4	23,095 3 10	1,980 5 4	157 1 4	121 0 6	27,955 3 4
7	Godhra	797 0 11	322 3 7	17 2 0	28 6 0	99 11 3	210 13 0	2,494 0 0	3,969 4 9	299 10 6	25 8 0	323 3 7	3,179 1 0	237 15 4	.....	72 3 0	4,136 9 5
8	Umreth ..	1,366 4 4	903 6 0	156 0 0	57 0 0	884 7 9	1,062 0 0	3,906 2 11	8,335 5 0	921 12 4	.....	743 12 3	8,646 0 0	451 11 11	.....	133 4 10	10,936 9 4
9	Nadiád	2,646 8 0	681 5 4	727 2 0	181 0 0	167 4 3	843 4 0	326 0 0	5,572 7 7	252 15 7	323 10 0	1,092 0 5	9 287 15 6	1,410 14 0	.....	170 10 3	12,538 1 9

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Further note by Mr. J. Mollison, Deputy Director of Agriculture, for the Famine Commission.

No. 40, dated 27th January 1901.

From—The Deputy Director of Agriculture;

To—The Chief Secretary to Government, Revenue Department.

In continuation of my report on Questions 66 and 67 drawn up by the Famine Commission, I have the honour to submit the following remarks on certain other matters at present under enquiry by the Commission.

2. I feel strongly that the Bombay Subordinate Revenue Service would be considerably strengthened if recruited more extensively by agriculturally trained men. The rules regulating the work of Circle Inspectors, District Inspectors and Superintendents of Land Records and Agriculture clearly contemplate that such officers should have special knowledge in agricultural and survey work. It is clearly laid down that Circle Inspectors shall watch the season in their circles, detect as early as possible signs of crop failure and coming distress. They must watch fluctuations in prices, the conditions of the people, cattle and crops, the supply of drinking water, diseases affecting man and beast. They are required to study the varieties of crops and crop mixtures, rotations, cultivation, manures, crop diseases and blight, also to estimate outturn in annas. They must check returns of population and agricultural stock, village estimates of areas under different crops, also irrigated, dry crop, and double cropped areas. The Circle Inspectors must further be educated in survey work as measurers and otherwise.

3. The District Inspectors and Superintendents of Land Records and Agriculture exercise a superior check on the work of Circle Inspectors. Statistical and other returns are passed on by Circle Inspectors through District Inspectors, Mahálkaris, Mámlatdárs, Assistant Collectors and Collectors to the Director, Land Records and Agriculture, for compilation.

4. It is, I think, certain that approximate accuracy in agricultural and statistical village returns can only be secured if supervised by agriculturally trained men. At present the Circle Inspectors in the Bombay Presidency, who do the most reliable work, are I believe old survey men, who owing to the winding up of the survey have been compulsorily retired from that Department. They were trained in that Department to active out-door work, and to appreciate in a practical way agricultural facts and operations, and as Circle Inspectors such training has been found valuable.

5. It is unlikely that agriculturally trained men will accept Circle Inspectors' posts of Rs. 25 per mensem, unless they can by ordinary promotion and good work rise in time to be Mámlatdárs. I do not suggest the necessity of special promotion for any agriculturally trained man. At the same time there can be little doubt that such men as show special aptitude and reliableness at work would have more or less of a lien on such posts as District Inspectors, Price Inspectors, Superintendent of Land Records and Agriculture, and in responsible posts in the Department of Land Records and Agriculture. The clerical and supervising establishments controlled in his own office and on Government farms by the Deputy Director of Agriculture should be recruited from agriculturally trained men whose prospects of promotion should not be inferior to the prospects of men who join the Revenue Service.

6. It is necessary to explain the term "Agriculturally trained." The Bombay University gives a degree in Agriculture. The syllabus has recently been revised and the pass test stiffened. In order to gain the degree a thorough practical out-door or field knowledge is now fully as essential to the student as book or class-room learning. The course extends over three years. A student must pass the Previous Examination which is a higher test than Matriculation before he can enter the Agricultural course at the College of Science, Poona. This preliminary test is the same as for students who go up for other University degrees and is a guarantee of sound general education. Afterwards the agricultural student must pass three University Examinations. The first before he can pass to the 2nd year's course, the 2nd before he can pass to the 3rd year's course, the 3rd in order to get the degree. The practical training can adequately be given at the Poona Government Farm (on which are residential quarters for students) and by excursions. As far as possible object lesson plots are arranged annually to familiarize students with the numerous field and garden crops of the Presidency and the conditions under which they are successfully grown, and further to illustrate, practically in the field, the class-room teaching. There is a complete collection of indigenous agricultural implements at the farm, and an excellent museum collection of agricultural and economic products at the College and in the Director of Agriculture's Office. The teaching staff and equipment at the College of Science are sufficient.

The Bombay Government has ruled that in future Agricultural degree holders shall gain admissions into the revenue service on precisely the same footing as other University degree holders. The effect has been that the Agricultural classes at the College of Science have revived. They had dwindled to a single student in 1899. Twelve joined in 1900 and I understand 13 new students have joined this month. Poona will be a centre of training for other Provinces as well as Bombay, and I urge the need of a general ruling regarding the employment of such men in all Provinces and particularly in the Departments of Land Records and Agriculture. In the latter Department even in Bombay the prospects of Graduates in Agriculture are indefinite.

8. I advocate strongly that Bombay Civilians after they are, say, a year and a half in the country, be sent to the Deputy Director of Agriculture during the monsoon in Poona for two months to be taught something regarding the crops, the implements, the soils, the cattle and generally regarding the agricultural conditions of the Presidency. I am sure they would find such teaching valuable afterwards in ordinary district routine work. I have at present in the Press a treatise on Indian agriculture, which is perhaps specially applicable to Bombay. It will be issued in three volumes of handy size, and deals with the subject-matter of the Bombay University Syllabus for the degree in Agriculture. I believe the work will be valuable for students, teachers and district officers.

9. In my previous report which has already been put before the Commission, I incidently referred to the special advantages of takávi advances for repairing, deepening and constructing wells in a famine year. I wish to discuss this question more broadly because in my opinion certain evidence submitted to the Commission, as reported in the public press, is not correct.

10. The return which shows the number of wells in the Presidency is quinquennial. The last was recorded in 1896-97. The next will, I believe, show a remarkable increase. I believe that in all districts where local conditions were favourable for irrigation unusual activity was shown in constructing wells after revision survey. Throughout the Presidency the oldest wells may generally be said to occupy the best positions. In the rolling up-lands of the Deccan and the Southern Marátha Country (excluding the red laterite soils in the west of Belgaum and Dhárwár) it may be definitely said that the favourable positions for wells are the bottom lands consisting of mixed black soil 18″ to 4 feet deep, overlying murum, with unchanged trap rock still lower down. These substrata are pervious to moisture and secure natural drainage—very important considerations when land is continuously irrigated. Fringing the more important rivers of the Deccan and Southern Marátha Country, such as the Tápti in Khándesh, the Godávery in Nagar, the Krishna in the Southern Marátha Country, the soil is deep black. It gets sodden and wet in the monsoon. It is extremely retentive of moisture, it is not pervious and consequently unsuitable for growing irrigated crops. Such land grows rabi crops best. The older best situated wells in the Deccan and Southern Marátha Country in average years hold at reasonable depth sufficient water to keep actively at work sometimes two or more motes. In an average year a single mote, for a crop requiring light irrigation, might irrigate in the rabi season 3½ to 4 acres at the most, but after a season of scant rainfall not usually more than perhaps half the above area and to do so the mote would have to be worked intermittently late in the season, both day and night. A mote at full work would not usually irrigate more than 2 to 2½ acres of such crops as require much water, *e. g.*, sugar-cane.

11. There are throughout the Deccan and Southern Marátha Country very numerous situations where wells can still with great advantage be constructed. Takávi advances for such wells would in my opinion be money well invested. I should prefer infinitely to see takávi for wells given with freedom and liberally in ordinary years rather than in famine years. In the interest of Government and of agricultural improvement, I consider that special enquiry by an experienced officer is necessary in every individual case before takávi can safely be given for well construction. A Revenue Service recruited with agriculturally trained men would have no difficulty in properly dealing with each application. It would be better to advance to individuals rather than to communities. It is useless helping a cultivator with takávi for a well unless he is tolerably well-circumstanced. Unless he can command sufficient work cattle, sufficient labour and sufficient manure, it is useless for him to attempt to grow an irrigated crop. The cost of raising water from a well is such that only a good irrigated crop will pay. A poor crop must of necessity be produced at a loss. A good crop can only be grown if heavily manured, carefully cultivated and regularly watered.

12. In a famine year although special officers are employed to deal with applications for takávi, the period is so short in which takávi for wells can be made that such advances cannot be extensive. Enquiry on the spot by a Government officer is essential. It takes some time to sink a well through hard trap in the Deccan. In a famine year the water level is lower than in ordinary years, and as the season advances gets lower every day. Rabi irrigated crops can only be sown seasonably during a certain period. Even in good wells

the water gets low in the hot weather and it is practically useless giving takávi for wells, except for deepening, after November-December.

13. In Gujarát the conditions under which well irrigated crops are grown are more various than in the Deccan. It is perhaps necessary to describe these conditions so that the difficulties connected with takávi advances may be appreciated. Throughout Broach, excepting the alluvial belt along the Tápti and the sandy belt along the coast, the soil is deep black cotton soil. Such land is entirely unsuited for irrigation in an ordinary year and might be temporarily spoilt by irrigation in a famine year. The character of the soil and sub-soil is such that katcha wells would fall in if the surrounding land is irrigated. Therefore although they could be cheaply dug in a famine year, they would be practically useless for irrigation, excepting in places where the soil is not deep black cotton soil. The soil in the Surat Collectorate is more variable and, although in the cotton growing tálukas it is mostly black and deep, still there are places where it is more mixed in character and where well irrigation is extending. In particular clay loam (Káli besar) soils adjacent to the alluvial soils of garden villages are being extensively brought under well irrigation since the revision survey, and takávi can advantageously be given for new wells in such land, but on other mixed black soils suitable for irrigation in the cotton growing tálukas it is uncertain whether a well when constructed will yield sweet or brackish water. Water which is sweet early in the rabi season may turn brackish during the hot weather annually. Brackish water for irrigation deteriorates temporarily or permanently mixed black soil, and on any soil is only suitable for certain crops.

14. In the Kaira and Ahmedabad Districts there are certain salt lands existing in some places in patches, in others in more extended areas. Wells constructed in such lands have usually brackish or salt water useless for irrigation. After a year of drought in these salt land villages, well water which is usually slightly brackish may become intensely so. In the more fertile villages of Ahmedabad and in the Charotar villages of Kaira the deep wells hold an unfailing supply of water which, however, in places is brackish and therefore only specially valuable for tobacco. In a famine year, however, in these fertile villages takávi advances for digging katcha wells are of the greatest utility. The digging through the soft alluvial soil is very easy. The perpendicular sides of the katcha wells are very solid and even, and it is exceptional to find a katcha well falling in during the fair season. These wells provide a cheap, temporary means of irrigation and are constructed mostly by home labour. A takávi advance of Rs. 25 or Rs. 30 at most is all that an ordinary cultivator would need for digging the well and for the leather bag (kôs) and other fittings. The conditions are favourable for digging katcha wells in part of the Panch Mahálś, but I do not know the district sufficiently well to indicate to what extent.

15. Pucca built wells of ordinary depth and capacity, in the more fertile parts of Ahmedabad and Kaira, cost one thousand to fifteen hundred rupees, and large wells capable of working 4 kôs much more. The deep alluvium of Kaira and Ahmedabad, particularly if sandy in character, needs water very frequently, and a single kôs will not irrigate so much as a single mote in the Deccan. These Gujarát wells are, however, usually capable of keeping two or more kôs at regular work.

16. I have given the foregoing particulars to indicate the need of caution in advancing takávi for wells throughout the Province of Gujarát and to show the necessity of enquiry by an experienced officer in respect of each application in any part of the Presidency.

17. I submit the following remarks on incidence of assessment.

Generally throughout the Presidency the burden of assessment cannot with any degree of correctness be gauged by the percentage incidence of assessment on gross value of outturn. If I were an agriculturist with means (*i. e.*, not in debt or in the clutches of a superior holder) I should prefer to pay the Rs. 7 or Rs. 8 charged per acre for good dry crop land in Gujarát than to pay 4 annas per acre for much of the up-land lands in the Deccan in parts where the rainfall is precarious. In average years the percentage incidence may work out 20 per cent. for dry crop lands in Gujarát, but if the cost of cultivation and rent is deducted from the value of produce a considerable margin of profit remains. The incidence for such Deccan lands as I have referred to may be 5 per cent. and often is a good deal less, but the margin of profit is extremely small. In fact, if hiring rates for manual and bullock power labour were charged for all tillage operations the cost of cultivation would exceed value of outturn.

18. In those parts of the Presidency where the assessment on rice land, garden land and dry crop land is highest, the rainfall is so regular and favourable and the natural fertility of the soil is so great that liberal skilful cultivation is very profitable. There is evidence of this in the rents which a good *bonâ-fide* tenant pays to a superior holder. For good dry crop black soil in the cotton growing tálukas of Surat a rent of Rs. 16 per acre is often obtained, the assessment being Rs. 5 or 6. On the other hand, in the outlying fields of remote villages I have found, when taking crop experiments, instances of Inám and Government numbers being let at the Government assessment or not much above Government

assessment. I could find without much difficulty outlying rather highly assessed fields in many villages in Broach and Surat which habitually produce poor crops. The incidence of assessment on gross value of produce would work out usually much over 20 per cent. The classification of the land is not wrong. The Survey Department cannot be taxed with bad work. The land is naturally as fertile as that nearer the village site. It is usually cultivated by a poor Koli. He owns a single bullock. He joins issue with his equally poor neighbour who owns another bullock and they jointly own a pair. The land never gets a pinch of manure. The pair of work cattle are not sufficient to cultivate the whole area properly. Tillage is scamped, weeding neglected and the crop is necessarily poor. Indifferent cultivation and poor crops are also common in dry crop fields in Surat and Broach rented by superior holders to tenants. Ordinarily the whole Province of Gujarát is absolutely safe against even partial failure of crops. When famine comes naturally the poor Koli with the outlying field and the cultivating tenants easily go under, and soon become a burden on the State,

19. In every Collectorate of the Presidency the Revenue officers know that the cultivators as a class are largely indebted. I am quite sure that the general cultivation and the general outturn of the Presidency in an average year suffer greatly on this account. The burden of assessment generally I would call light, the other burden exceedingly heavy.

20. There are, no doubt, instances where the assessment is higher than it ought to be. Very light sandy soils have been relinquished in the Ahmedabad District, but in parts of the district there are large areas of waste land which is quite culturable and would be very valuable in other districts where there is greater pressure on cultivation. Lands have become deteriorated by salt and by water-logging, and local officers bring these facts to the notice of Government to obtain sanction for the necessary reduction in assessment.

21. The moderateness of assessment is very clearly brought out when there are facilities for high pressure farming. Medium black soil irrigable from the Karakwásla Canal near Poona is assessed at Rs. 2 more or less per acre. It grows, with canal irrigation and helped by heavy dressings of poudrette from Poona City, sugar-cane and other crops. The rent for such land is Rs. 30 per acre per annum. The manure costs Rs. 200, often more per acre. The charge for canal water for sugar-cane is Rs. 40 for 12 months. A good crop at ordinary rates is worth Rs. 600 per acre.

22. The incidence of assessment in garden lands in any part of the Presidency is extremely low. The assessments are however high in respect of actual figures—Rs. 15 per acre or more in Gujarát, *e. g.*, a very trivial item of the expenditure incurred by the well-to-do market gardener. In Gujarát he grows a very great variety of crops—sugar-cane, ginger, termeric, yams, sweet potatoes, potatoes, cabbage, onions, garlic, surans (elephant-foot)—almost all these crops will be found in each garden. The wells are continuously at work and two crops in a year are generally got. The cost of raising the water per acre per annum exceeds Rs. 100. High pressure farming of this sort necessarily needs heavy applications of manure. The capital invested in every garden is very great. It is of course profitably invested. As an extreme instance indicative of the capital invested, I will take the case of surans (elephant-foot) (*Amorphophallus campanulatus*). Small buds cut from a big suran are planted in a nursery and each grows into a small suran in the first year. These small surans are thickly planted in the second year in beds and grow into bigger surans. The produce of the second year is planted in the third year in a different area and wider apart. They grow into surans which weigh 3, 4 or 5 lbs. The bigger are sold, the smaller are planted on a different area in the fourth year—either 6 or 8 in a bed and about 600 beds per acre. The surans planted weigh at least 14,000 lbs. per acre. They are worth Rs. 20 to 25 per candy of 780 lbs. The value of seed is at least Rs. 360 per acre.

23. I have only to add that if we had in the Bombay Presidency a well in every *favourable position* and a skilful cultivator for every such well *with capital sufficient* to utilize the water to the best possible advantage, we would hear little regarding the burden of assessment and know nothing of the distressful poverty and starvation of man and beast in a famine year.

LIEUTENANT-COLONEL CLARKSON, SANITARY COMMISSIONER OF THE BOMBAY PRESIDENCY.

Mr. Bourdillon.—How long have you held your appointment?

A.—Since 1896.

Q.—How many Deputy Sanitary Commissioners have you?

A.—Five. There is the Sind Circle, the Gujrat Circle, the Western, Central and Southern Registration Circles.

Q.—They collect statistics and send them on to you. What arrangements were made for supplying District Officers with copies of the statistics?

A.—As soon as my returns are completed they are sent to Government.

Q.—Are the figures published in the Gazette?

A.—I think not.

Q.—What special arrangements were made in your department during the famine? I understand a medical officer was appointed for each district. He worked directly under you. What were his duties?

A.—They are defined in the Code. He was supposed to be put in early in the famine to make himself acquainted with the condition of the people; and when camps were started it was his business to look after the sanitary arrangements in accordance with the directions laid down; to see that the medical officers did their duty; and to bring to light any defects he saw.

Q.—They corresponded direct with you?

A.—Yes.

Q.—Were the District Medical Officers under the Deputy Sanitary Commissioners?

A.—No; the deputy's business was to look over the whole district, generally, as well as conduct his own ordinary work; and these officers were appointed specially for the famine.

Q.—Did you have a medical officer for each district?

A.—Not quite for each district. They were appointed for the Northern Division in Ahmedabad, Broach, Kaira, and the Panch Mahâls; in the Central Division in Ahmednagar, Poona, Satara, Sholapur, and in the Western Division in Khandesh and Nasik; all the most severely distressed districts. We wanted them, of course, for others, but we could not get the men. At first it was attempted to get I.M.S. men, but they were not available, so the services of the gentlemen sent out to the plague work by the Secretary of State were used. They came out for a year with the option of going on. We had great difficulty in getting even these, and there were many changes so there was a considerable break in continuity.

Q.—And some did not know the language?

A.—None of the Secretary of State's men knew the language.

Q.—At what time were they appointed?

A.—8th November in Ahmedabad, 26th December in Broach, 11th November in Kaira, 31st January in the Panch Mahâls, 24th December in Ahmednagar, 5th February in Poona, 26th May in Satara, 18th January in Sholapur, 24th December in Khandesh, and 3rd February in Nasik.

Q.—Till they were appointed the Civil Surgeon had to get on as best he could?

A.—He could not look after camps as a travelling officer could. All he could do was to supply the medicines as laid down in the Code for the medical officers at camps.

Q.—Did you undertake the supplying of these subordinate medical officers for camps?

A.—No, the system is that application is made to the Surgeon-General where a camp has been opened and a medical officer is required. He transfers a Hospital Assistant or an Assistant Surgeon for that camp. Then he comes under me.

Q.—Until a medical officer was appointed these men had to get on as best they could, taking orders from the Collector or anybody?

A.—They were given a set of regulations and had to do as best they could.

Q.—Did you travel about much yourself?

A.—I was not in charge during the entire period of this famine. I was absent on furlough. There were three Sanitary Commissioners appointed. I came on April 21st, 1900, and remained in charge to the end. I came up here at once because there was a report wanted, and I stayed here till the rains broke in July.

Q.—Did you go round before the cholera broke out?

A.—Yes; I had some idea of the condition of the people before the epidemic set in. Their condition on camps was not at all bad. There were a few emaciated people, but they were put in proper gangs. On the whole things were going pretty well; there were very few complaints.

Q.—Was the wage scale sufficient?

A.—Yes; these people were getting enough to live on as far as I could see, but they were not all doing their tasks and getting the full wage. It was the new-comers who were always in poor condition; they pretty well filled the hospitals; they were those who delayed too long in coming to our works.

Q.—Were the sanitary arrangements generally satisfactory?

A.—On the camps I visited I thought they were very good; they had taken a good deal of trouble about them.

Q.—The class of Hospital Assistants was not of the very best?

A.—So long as we got men who belonged to Government service we had a very good stamp of men; but when you have to advertise for men you do not get such good ones. They do not know the regulations or what to do.

Q.—Did you travel about in the villages?

A.—Very little. I was chiefly looking after the camps, especially at first.

Q.—After the cholera broke out at the end of April and beginning of May you went round again?

A.—Yes.

Q.—How did you find your subordinates tackling the cholera?

A.—I thought they stuck to it remarkably well. There were men, of course, who would not do anything and ran away; but the majority stuck to their work most manfully. They did the best they could, but it was a case of having to do two or three men's work, and you cannot expect much in that case.

Q.—We have been told that there was a good deal of scattering; that the people took the cholera all over the country. There must have been a great deal of mortality in the districts?

A.—Yes.

Q.—You made a special report in August to the Surgeon-General in which you specially analysed the mortality for the first three months before the cholera broke out in January, February and March?

A.—Yes. I attributed it to the privation of food; there were other contributory causes; climatic conditions aggravated it; there was a great range in temperature for instance in Ahmedabad. The greatest range there between maximum and minimum was 30·12 degrees in a day.

Q.—You made inquiries into the administration of gratuitous relief?

A.—No; it did not fall within my province.

Q.—You are satisfied that the mortality returns on the whole are correct?

A.—In the season of cholera not so, probably. In this country the bodies are so quickly disposed of that it is difficult to get accurate diagnoses. The cholera mortality was certainly greater than it is represented. You cannot expect such agencies as we had to diagnose disease.

Q.—Have you any statistics of the immigrants?

A.—It was brought to my notice too late. I was going to get them as far as I could in the hospitals, but I am still of the opinion that part of the high mortality was due to the large influx of people from Native States coming in an emaciated condition.

Rao Bahádur Syam Sunder Lal.—Would you say that of the mortality in the villages nearly a half was due to persons returning from the works to their homes?

A.—I should not say that.

Q.—Was there much of that sort of mortality before the cholera broke out?

A.—I could not tell you, but there is no doubt that people did return to their homes and die, because when anyone fell ill he would go off accompanied by the members of his family towards his village and then there was very little chance of his recovery.

Q.—What was the prevailing disease?

A.—Mostly fever, dysentery and diarrhœa. In Ahmedabad cholera was 10·4, small-pox ·07, fever 57·6, dysentery and diarrhœa 9·1, injuries ·4, other causes 22·5.

The President.—Would you, as far as the sanitary aspect of the famine and mortality are concerned, be disposed to draw any broad line of distinction between Gujrat and the rest of the province?

A.—I do not think so.

Q.—It seems from the figures that such a broad line may be drawn. [After reciting the death rates in April and May, the President continued:—] Could you not divide the province into two parts so far as heaviness of mortality is concerned; the four distressed districts of Gujrat and the rest of the province?

A.—Yes.

Q.—As to the causes; we were told yesterday by Major Dyson that the year might be divided into three periods; (1) from the beginning of the famine up to the outbreak of cholera, (2) the cholera period, and (3) the rains period. In the cholera period the mortality had a tangible cause; in the rains period he said we had a tangible cause in the exaggeration of climatic conditions, the season being unusually unhealthy, in June, July and August, and for the period up to May, when cholera began, he said it was due altogether to privation, to deficient food. Is that your view?

A.—I think it would be.

Q.—In the period before May the rising mortality attracted the attention of the local Government, and you were appointed to make a local inquiry. Do you connect that rise in mortality with any defect in the relief administration of the province?

A.—No, I do not.

Q.—Did you inquire into the character of the relief administration with that view; into the number of people admitted to gratuitous relief?

A.—No.

Q.—It has been stated by Major Dyson that the mortality was in part caused by the inadequate distribution of gratuitous relief. My attention is called to the report of the Surgeon-General of the 24th August in which he says "it will be seen that in the case of Kaira and the Panch Mahâls the death-rate was proportionate to the comparative smallness of the percentage of the population on relief; and that in the Panch Mahâls and Broach it was also in direct ratio to the lower percentages of persons gratuitously relieved than in other districts. Whether these facts stand in the relation of cause and effect, I am unable to say; and possibly there were causes which prevented the full extension of relief in Kaira and the Panch Mahâls. But

I would observe that in the Broach Collectorate, which had the largest percentage of relieved to the population, the better opportunities for gratuitous relief were taken advantage of to a less extent than in any of the other Collectorates, and the death-rate per mille per annum was only second to that of the Panch Mahals."

Let us take the case of May. You had a percentage in Broach on gratuitous relief of the affected population of 1·84 and in Kaira 1·70, but you had in Broach a death-rate of 31·62 per mille, while in Kaira it was 22·16. That is an illustration of the difficulties which I find in these figures; that the death-rate is not always proportionate to the distribution of relief. Can you give me any explanation of that?

A.—Might it not be the number of strangers in the place, who were not, of course, gratuitously relieved?

Q.—But would not that factor be common to all districts, or do you say in this particular instance, Broach was more subject to immigration than Kaira?

A.—That is one of the explanations I think.

Q.—Are there any other reasons? In June, in Kaira, you have 2·67 per cent. on gratuitous relief, and 3·82 in Broach and the mortality in Kaira and Broach is almost the same, 11·77 in Kaira and 12·03 in Broach. There the extension of gratuitous relief does not seem to have brought down the mortality. In Kaira, in July, the gratuitous relief was 7·56, in Broach 14·87, but the mortality in Kaira is 15·10 and in Broach 15·57. Have you examined the statistics from this point of view? Have you submitted your sanitary report for the year?

A.—Not yet.

Q.—Would you say the non-extension of gratuitous relief in the early part of the year, with the people in an enfeebled state, would make itself felt in the mortality of June, July and August?

A.—They would not rapidly recover.

Q.—When cholera broke up the people, did it occur to you to recommend the division of the people into small groups with the object of moving them from places of infection?

A.—The difficulty was to do it. The people dissolved themselves before you had time to make any arrangements like that.

Q.—As an officer accustomed to troops you consider that people can be better dealt with when divided into small bodies?

A.—Undoubtedly.

Q.—In future would you suggest from a sanitary point of view an organization on public works of putting the people into separate bodies?

A.—Certainly, if you can supply the establishment.

Q.—Of course it gives you a better chance of dealing with epidemic disease?

A.—Yes.

Q.—It has been stated that with two or three exceptions the poorhouses were not well managed. Does your experience suggest that the absence of proper control over poorhouses to which Hospital Assistants, I suppose, were attached, also contributed to the great mortality?

A.—I did not see many poorhouses and those I saw were controlled by efficient officers and were in good condition.

Q.—Were they in large centres of the population?

A.—Yes.

Q.—Did you ever visit Dohad poorhouse? Was that in good condition?

A.—Yes, that was an exception undoubtedly. I only had control of the medical part of that. My duty was to see that the people were fit subjects for a poorhouse and look into the hospital arrangements.

Q.—Did you consider that the hospital was in need of greater control and more responsible management?

A.—Yes.

Q.—Would you say all poorhouses would be improved by better management?

A.—I did not see any others so badly managed as the Dohad poorhouse.

Q.—You say the Civil Surgeon is not responsible for the sanitary affairs on works. Is he not the Sanitary Officer of the district?

A.—Not in this Presidency.

Q.—Have you a Sanitary Officer for every district?

A.—No, our Deputy Sanitary Commissioners are the Sanitary Officers.

Q.—How many have you?

A.—Five.

Q.—Did you inquire into the task of the people and see whether they were getting a sufficient wage? I only want to know how far the Sanitary Department in Bombay assisted the relief administration. Because persons not earning a full wage might be undergoing anything between starvation and gradual deterioration and that might be due to an excessive task. Do you not think that if on a future occasion you found people not earning a sufficient wage, it would be well to look into it?

A.—Yes.

Q.—In the Deccan there was great recusancy and in many cases the penal minimum of nine *chattaks* was being earned. Do you consider as a medical man that 9 *chhataks* is sufficient food for an adult to live on?

A.—It is a bare sustenance wage for a man weighing 105lbs. and doing no work. The average weight of the females of the Deccan is 90 pounds.

Q.—Did any emaciation strike you on these Deccan works?

A.—My inspections were very rare. I was up here most of the time, but the people I saw were not particularly emaciated.

Q.—I would like to have your opinion on the sufficiency of the wage as a whole; 19 *chattaks* for a digger doing hard work, 15 for a carrier, 10 for a working child between 10 and 14. Is the child's wage adequate?

A.—Yes, I would not reduce it or raise it.

Q.—Is 15 *chattaks* enough for an adult carrier?

A.—It is just right.

Q.—Is it desirable to have a sexual distinction in wages? Does a woman require less to support her than a man?

A.—The wage is fitted to the work, a woman doing less work, would be supported on less food than a man.

Q.—Would 14 *chattaks* be enough for a woman?

A.—I think 15 *chattaks* is what they ought to get.

Q.—You think 13 *chattaks* for a woman would be too little?

A.—Yes, if she did a hard day's work and is to keep herself in health.

Q.—Is it in accordance with medical opinion that people require less in the cold weather than in the hot?

A.—Not with my own. Because in the cold weather they are apt to do much more work.

Q.—Is 19 *chattaks* necessary for the digger, the man who does a full tale of work? Some have said 17 *chattaks* is sufficient.

A.—I should put it pretty high. I should probably find, if I worked it out that 19 *chattaks* was not too high for a full day's work.

Q.—Is 12 *chattaks* for dependants doing nothing at all sufficient?

A.—Yes, for people in fairly good health. People in poorhouses require a little more.

The witness then said.—I hope the Commission will allow me to suggest that if a District Medical Officer is to be appointed he should be appointed as soon as possible so that he can look round to see the condition of the people. He ought to be appointed as soon as famine is declared; it ought to be a thing that the Surgeon-General can act on at once.

The President.—Would you not go further and say that you ought to have a staff of Hospital Assistants and so on? In case you could not get all the Hospital Assistants of the proper stamp educated in your medical schools would it not be a good thing to employ native *hakims* and *vaids*?

A.—I have seen something of *hakims* and *vaids*. They are not educated and do not know the English drugs. I am afraid it is not possible to have them. The sort of man you would get is the quack who goes round to towns professing to cure all diseases and after selling his medicines goes away. I would not trust the *vaid*.

I think it ought to be a recommendation that the Hospital Assistant should get at least Rs. 40 and the compounder Rs. 15. And the officer who pays on a camp ought to be empowered to give a Hospital Assistant up to half his pay in advance.

Q.—That is a big question.

A.—But I am only thinking of the medical officer and his compounders. They have complained to me because they did not get their pay and to obviate that I propose that the officer who pays on a camp shall be entitled to advance them half their pay; he would get it back when the pay arrived.

Q.—Upon whom rested the responsibility for supplying you with these officers you wanted?

A.—The Surgeon-General. I would also submit that the Sanitary Commissioner ought to have some assistance for doing his office work. He goes out to famine duties in fear and trembling to think of the amount of ordinary work he will have to do when he gets back. He ought to have a Secretary.

Witness subsequently supplied the following statement:—

Month.	Number of deaths calculated in mean death-rate for the month exclusive of plague.	Actual number of deaths during the month from—		Population of affected districts.
		All causes.	Cholera.	
October 1899	33,298	44,084	269	12,282,496
November ,,	32,664	38,132	25	
December ,,	31,521	43,082	21	
January 1900	30,849	54,927	394	
February ,,	26,672	54,998	487	
March ,,	30,669	77,765	5,430	
April ,,	32,547	94,275	15,338	
May ,,	32,258	129,359	32,600	
June ,,	29,415	109,455	30,613	
July ,,	35,435	130,664	32,026	
August ,,	39,183	120,043	13,271	
September ,,	34,464	89,449	2,190	
October ,,	32,857	74,089	385	
November ,,	33,166	58,377	221	
Total	454,998	1,118,699	133,270	

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Lieut.-Colonel J. W. CLARKSON.

Replies by Lieut.-Colonel J. W. Clarkson, Sanitary Commissioner for the Government of Bombay, to the questions drawn up by the Famine Commission.

Question 94.—The system of registration of births and deaths on famine camps was that all deaths occurring in a hospital were reported to the Special Civil Officer. He also got information of deaths in camps, occurring outside hospital. These deaths were then entered in the register of the village within whose limits the famine camp was situated, or were sent direct to the Mámlatdár. In either case they were compiled for the táluka in the office of the Deputy Sanitary Commissioner of the district. Births are registered in the same way.

95.—It is impossible to say with accuracy how far a very high mortality is attributable to unsuitable or insufficient food. In Gujarát, where the high mortality is attributed to unsuitable and insufficient food, it has to be remembered that the people as a rule were used to being well fed and that they clung to their homes as long as they could and did not come on the works in good condition. The mortality was also swelled by the number of immigrants arriving in poor condition and almost refusing relief.

Numbers crowded into Ahmedabad and tried to live by begging. When sent to the poor-house (near Dhuliá-kot) they broke out and begged in the town or outskirts until they succumbed or were taken in an emaciated condition to the poor-house. The Deputy Sanitary Commissioner, Gujarát Registration District, writes that between 12th March and 11th April 1900, 756 destitute people were admitted. Between 1st and 12th April 188 deaths, of which 117 were due to dysentery and diarrhœa, took place, and three-fourths of the deaths occurred within four days of admission.

Again, in Sind, the Deputy Sanitary Commissioner, Sind Registration District, states that the high mortality in Umarkot town was due to people who had stayed in their homes too long and then started for Umarkot across the desert without sufficient means and arrived in such an emaciated condition that they easily succumbed. In the camp bazárs the food exposed for sale was of good quality, but as the Deputy Sanitary Commissioner, Gujarát Registration District, and the District Medical Officer, Kaira, state, it was the eating of raw or imperfectly cooked grain (generally rice) which produced intestinal disorder, and so a distinction must be drawn between those dying in villages and *en route* to works and round about big towns, in which cases they not only had insufficient but also unsuitable food, and those dying in camps and poor-houses either from the previous effects of insufficient and bad food or from eating on camps food, good in itself but raw or imperfectly cooked.

96.—The drinking water-supply was as a rule sufficient. As to its impurity in the districts, it may be stated that the ordinary well and river water seldom comes up to the standard required for potable purposes and in certain parts, such as portions of the Ahmedabad and Broach Districts, it is apt to become brackish as the hot season advances, but unless only slightly brackish such water is not drunk. Such water when acting on enfeebled frames may indirectly help to swell the mortality, but I am of

opinion that the use of the water throughout the district by people accustomed to drink it was but a slight factor in the increase of mortality.

On works, poor-houses and kitchens every effort was made to obtain a pure water-supply and keep it pure, but the improvement or extension of water-supply in villages takes time and can only be effected gradually. Wells attached to camps and poor-houses and kitchens were disinfected once before using, but afterwards only at the discretion of the Medical Officer who would do it daily if cholera threatened. In some towns and villages within reach of a Medical Officer the wells were disinfected if cholera had broken out. The general consensus of opinion amongst the Deputy Sanitary Commissioners and District Medical Officers was that this disinfecting had beneficial effect.

97.—The special sanitary arrangements were much the same at works, poor-houses and kitchens.

At works huts were built in straight lines with intervals of 50 feet between each row

The water-supply was drawn from wells either by *kos* and run into a reservoir or by selected drawers and distributed by carriers in vessels not used for any other purposes. Wells were fenced and only those authorized allowed to come near them.

All nallas and water-courses near a camp were guarded and everything possible done to prevent fouling.

Latrines either of the trench or open surface pattern were on selected sites, for males and females separately, and a special set of sweepers told off to clean them or cover them with earth. In some cases, owing to the stretch of open country or when residence on camps was not enforced, they were not so much used.

The camps were kept clean by a staff of sweepers appointed for that purpose.

Burial grounds were selected at sites suitably distant from the camps, and graves six feet deep were ordered to be kept ready. In an epidemic and when the deaths were too numerous, corpses, save those of Musalmáns, were burnt. From what I have seen and from reports received these measures were sufficient. They were inspected regularly by the Medical Officer of the camp, poor-house or kitchen, and any defects were brought to the notice of the supervising officer, and if not remedied, a report was made to the District Medical Officer.

The Deputy Sanitary Commissioners or District Medical Officers also inspected all sanitary arrangements when visiting any camp and reported on the state of affairs.

98.—Grain shops at camps were regularly inspected by the Medical Officer and also by the Deputy Sanitary Commissioners and District Medical Officers on their visits of inspection. Very little unwholesome grain was exposed for sale, as when a case was detected the merchant was removed or remedial measures taken.

99.—There is little doubt that the wilder tribes who are in the habit of using wild products subsisted on them as long as they could, and it is these people who came on to works in poor condition and helped to swell the mortality.

I cannot say how far wild products in Gujarát were utilised after the rains of 1899, or what was the effect. I understand that owing to failure of the rains the growth

of these wild products was sensibly affected, but after the rains of 1900 there was a large growth. A seed called sámo was largely collected and eaten generally mixed with a third of some other staple grain. Opinions differ as to its effect on health. Other kinds of seeds, such as auchī mauchi and narido, if used alone, caused diarrhœa.

The mhowra crop which ripens during the hot weather on which the Bhils largely depend, was in 1900 a failure.

100.—The Deputy Sanitary Commissioner, Gujarát Registration District, states that there was undoubtedly constant immigration from Native States, but notwithstanding repeated trials, he has been unable to obtain even approximate figures.

He has frequently noticed in camp hospitals and poor-houses that a proportion of from 50 to 75 per cent. of the inmates belonged to Native States.

The District Medical Officers of the Gujarát Division also report that considerable immigration from Native States took place.

The rough estimates of these officers are that in Ahmedabad it was one-fifth of those relieved; in Kaira no estimate is given, but that there was considerable immigration especially into the Kapadvanj, Thásra and Mehmadabad Tálukas: poor-houses were often more than half filled by them.

In the Panch Mahálś it was 15 per cent. of the total relieved, but on some works it amounted to 30 per cent.

In Broach it is stated that two-thirds of the inmates of poor-houses in Broach and Ankleśvar were immigrants, and for the whole district a fourth to a half of those relieved.

J. W. CLARKSON,
Sanitary Commissioner.

THE HONOURABLE F. S. P. LELY, C.S.I., COMMISSIONER, NORTHERN DIVISION.

The President.—How long have you been Commissioner of the Northern Division?

A.—I came in 1896.

Q.—Had you previously served in Gujrat?

A.—I have spent most of my service in Gujrat.

Q.—And you know the circumstances of the division perhaps better than any other officer of the service?

A.—I have seen a good deal of it.

Q.—Would you be good enough first, briefly, to give the Commission your appreciation of what the condition of the province was when it entered the famine period, that is about the rains of 1899?

A.—The two previous years had been fairly good, but not enough to obliterate the effects of several previous years of short crops, and generally the situation, I should say, was one of some depression. There were several minor causes besides the short crops of four or five years. There are two crops which are mainly sown for cash—cotton and sugarcane. Since the Seventies the price of *jagri* fell from Rs. 4 to Rs. 2 per maund, which must have had a great effect. In the case of cotton the price had been gradually going down for 10 years; the average price from 1880 to 1890 was Rs. 226 a *khandi;* the average price for the 10 years from 1891 to 1900 was Rs. 201; in 1898 the price of cotton was at the lowest point since the American War; in 1899 the price was lower still. That must have had a great effect, especially in the Broach and Ahmedabad districts. There are also complaints that the soil is not so productive as it used to be; and in Broach I think there is something in that, the cause being the excessive growth of cotton to the neglect of a proper rotation of crops. Another minor effect is that there is no doubt that the habits of the people have grown more expensive in later days; the older man would have been contented with home-grown grain and country-made cloth; but the modern generation seek after sweetmeats and cheroots, Manchester-made cloth and *pán supári.*

Q.—It has been said that the production of food crops in Gujrat has fallen off in favour of the more exportable staple. Is that in accordance with your opinion?

A.—Statistics, I believe, show that of Ahmedabad, but I don't think of any other district. I should not have thought that that was the case even in Ahmedabad from my own observation.

Q.—Statistics have been furnished to us of the growth of food crops and non-food crops, and it has been stated that in Ahmedabad the percentage of the area producing food crops is 74 per cent. and the area producing non-food crops is 26 per cent.; in Kaira the food crop area is shown as 93 per cent. and non-food crops at 7 per cent.; in the Panch Mahâls the food crop area is shown as 90 per cent. and the non-food crop producing at 10. In Broach it is shown at 56 per cent. food crop area and 44 per cent. non food-crop area, and in Surat it is shown at 77 and 23. Would you generally be disposed to confirm these percentages?

A.—Yes, generally, except as regards the Broach district.

Q.—Is there much wheat grown in the Broach district?

A.—Yes.

Q.—Wheat is a usual exported crop, is it not, so that it might be taken for the purpose as a non-food crop?

A.—Yes, to some extent only.

Q.—You are in doubt regarding the percentages in Broach, but the other percentages recommend themselves to you?

A.—Yes.

Q.—You are not indisposed to think the reason why there was such a sudden collapse in Gujrat is that the people no longer grow food crops which are necessary for home consumption, that they grow more valuable non-food crops which they export for money, that the money slips through their fingers, that they had no reserves of grain such as cultivators in other parts of the country had. Would you be disposed to think that that is a proper appreciation of the situation?

A.—There is no doubt that a portion do convert everything into money. I should not say the collapse was due to excessive growth of non-food crops.

Q.—Has there been a reduction in the practice of storing grain for home consumption?

A.—Undoubtedly there has been, if you compare over a long series of years. Before railways came into Gujrat large quantities of grain were stored; the practice has now almost entirely ceased.

Q.—Do you think there has been a disuse in Gujrat of the practice of keeping grain from one year to another, with a view to having a reserve against scarcity or famine?

A.—Yes, in former days the man stored it because he could not get rid of it.

Q.—Has the immunity which Gujrat has enjoyed for more than two generations had anything to do with the disuse of that custom?

A.—Undoubtedly.

Q.—It is true that the Gujrati's source of wealth and his investments are chiefly in cattle?

A.—Yes.

Q.—Whereas in other provinces the cultivator hides his money or puts it into jewellery for his wife and family, in Gujrat there is a tendency to buy cattle?

A.—Yes.

Q.—And when Gujrat faced the famine year it faced it with small stocks and a large portion of the capital sunk in cattle and practically nothing else?

A.—There were also utensils and ornaments.

Q.—But I suppose not more ornaments than in other parts of the country?

A.—No.

Q.—Does a Gujrati turn more of his money into ornaments than the people of the same class elsewhere?

A.—He is much better able to do so.

Q.—Still there is a limit to the ornaments that can be used, and then the surplus capital goes in cattle?

A.—Yes.

Q.—That was the position of things. Then what was the effect of the rainfall of 1899 on the crops and fodder in the four districts?

A.—There were practically no crops and no fodder.

Q.—Do you include Surat?

A.—No, in the four distressed districts.

Q.—The absence of crops hit the people and the absence of fodder hit the cattle?

A.—Yes, the cattle suffered first.

Q.—It has been said that the people did their best to preserve their cattle: that was their first object; and that they got rid of their ornaments and utensils and even the rafters of their houses in some cases, while there was a chance of preserving their cattle, and in fact disposed of everything else they had, and meantime they kept away from relief works and so subjected themselves to great privations in order to save their cattle. Then still after all the cattle died, I have been told that in these four districts to the extent of 70 per cent. of the total number of cattle in the district?

A.—That is my general estimate.

Q.—So that when the cattle died there was a complete sweep of everything, and that is the explanation of the complete breakdown?

A.—Precisely.

Q.—What were the class of people that first showed the pinch of distress?

A.—It began with the fringe of the population that there is in every village, who live on the village—the village servants, beggars, and so on. Then it spread to casual labourers and gradually to permanent labourers; then to the lower class of cultivators, and then to the better class of cultivators.

Q.—When did the first approach of distress make itself manifest: in August?

A.—Yes.

Q.—How did it manifest itself in August?

A.—Chiefly by tree-cutting, the wandering of the cattle, and to some extent of the people.

Q.—What do you mean by tree-cutting?

A.—Chiefly to sell as fuel, to get some little money.

Q.—Were these trees their own property?

A.—No, mostly Government trees.

Q.—That was a species of petty crime?

A.—Yes.

Q.—Were there other manifestations?

A.—Yes, the wandering of cattle in search of food, the wandering of people to some extent, and the influx of immigrants from Márwár, besides of course the general appearance of the country, which was unmistakably famine-stricken.

Q.—When you had to deal with the wandering of people and so on, I suppose private charity had contracted and that beggars were thrown adrift?

A.—There was a geat deal of private charity even then.

Q.—Then did you adopt a system of poorhouses to pick up wanderers?

A.—It was a part of our scheme, but Ahmedabad was a great centre of immigration owing to the reputation of the people for charity.

Q.—I see in September you had no poorhouses established; in October you had some poorhouses in the Panch Mahâls; even up to the end of November no poorhouses are shown as being established in Ahmedabad, Broach, and Kaira. If these figures are correct, you don't seem to have put the establishment of poorhouses in the forefront of your scheme of relief?

A.—No, for some time we trusted first of all to private charity and we made strenuous efforts to return the people to their homes. The first poorhouse in Kaira was opened on 28th October.

Q.—Looking back, do you think if it should occur again, you would be disposed to establish poorhouses in some of the most important centres, say a poorhouse for every *taluqa* or for every two *taluqas* about the month of November?

A.—Certainly not before; certainly not as soon as immigrants began to be a nuisance; that would have attracted more.

Q.—Humanity forbade you to let immigrants starve; these people had to be picked up or be allowed to wander about and spread disease. What is your advice with a view to the future?

A.—In the early days I should trust to private charity, to the opening of works in large numbers and make efforts to send them back to their homes.

Q.—In order to make your efforts successful, would you not establish depôts with poor-houses attached in which immigrants and wanderers could be collected and disposed of, by being sent back to their villages?

A.—Yes, that would be a most desirable thing.

Q.—When the pinch was really felt and numbers were coming on your hand?

A.—I should not be in too great a hurry to establish even depôts.

Q.—Why would you postpone the establishment of depôts?

A.—I think they would tend to draw sturdy immigrants.

Q.—For the able-bodied you would provide works, would you not? And immigrants who die in the ditch did not come till a later stage in the famine?

A.—Yes.

Q.—Are you in favour in the commencement of a severe famine, such as you have had, of a policy of liberal advances of Government money as *taqávi* to cultivators?

A.—Yes. [Last paragraph of Commissioner's Circular, dated 9th August, read.]

Q.—As a matter of fact I suppose your *taqávi* advances were limited by the sum placed at your disposal by Government?

A.—Government gave all we asked for.

Q.—How much had you advanced in *taqávi* up to the end of December?

A.—Seventeen lakhs.

Q.—I may take these figures on page 6 of your replies as giving the amount distributed?

A.—Fourteen lakhs only shows the amount given from October and 17 lakhs is from the beginning of the year.

Q.—Do you think, looking back on the past, that your *taqávi* advances were as liberal as the circumstances of the case required?

A.—Fully.

Q.—I understand that in ordinary times you don't give any suspensions of revenue on account of crop failure?

A.—No.

Q.—But in times of famine your famine Code provides for a different policy. You had a total crop failure in Gujrat. That being so, was there a suspension of revenue ordered by Government at the end of last year or beginning of the present year?

A.—No; estimates were submitted, but no final orders were passed.

Q.—When were the estimates submitted to Government?

A.—Early in the year, about August I think.

Q.—What was the estimate for all four districts?

A.—About 45 lakhs: half the revenue. That was the preliminary estimate.

Q.—What were the orders passed upon that estimate?

A.—Government considered that 20 per cent. would be sufficient.

Q.—Was that suspension of 20 per cent. publicly notified?

A.—No, they called for revised estimates in the light of their opinion.

Q.—Was a revised estimate submitted?

A.—Yes.

Q.—When?

A.—Quite early in the year.

Q.—Before the regular pinch of famine came upon you, you submitted a revised estimate for the four districts of a suspension of 45 lakhs, out of how many?

A.—Ninety-eight lakhs, roughly.

Q.—What was the revised estimate you submitted?

A.—Practically a repetition of our previous estimate.

Q.—That a suspension of 45 lakhs should be granted?

A.—Yes.

Q.—What was the order passed? [Witness read an extract from the Government Resolution of the 16th of January.]

Q.—Then there was no declaration of any suspension?

A.—No.

Q.—Therefore the people remained under the impression that they had to pay the entire revenue?

A.—I suppose so.

Q.—Did you say the 20 per cent. suspension was not declared, so that while the pressure of distress was greatest people were under the impression that they had to pay the whole revenue of the year as usual?

A.—Yes, so far as any enunciation of the intentions of Government was made.

Q.—I suppose the result was that efforts were made to collect it?

A.—Yes.

Q.—These efforts to collect 80 per cent. of the revenue were continued?

A.—Yes.

Q.—Till when?

A.—They were continued more or less throughout the year.

Q.—Were further orders issued?

A.—No, practically no further orders were issued up to 31st March 1900.

Q.—Were any orders passed in the financial year 1900-1901 modifying or in any way altering these orders?

A.—Orders were issued by Collectors under the general orders of Government that inquiries should be made into the ability of the people to pay, and that in the case of those who could not pay without encumbering their land or cattle or implements necessary for earning their livelihood the revenue should be suspended. Proceedings were taken to draw up necessary lists.

Q.—In the case of people who could not pay, the revenue was suspended?

A.—Yes; there was no specific order that it should be notified to the people till later in the year.

Q.—Lists were being drawn up of the persons who could pay and those who could not pay?

A.—Yes; according to certain rules laid down by Government for distinguishing the various classes of persons.

Q.—When were these lists ready?

A.—By April.

Q.—Could you give the dates for the different districts?

A.—I could scarcely give that. I proposed that the lists should be formally sanctioned and it should be declared whose revenue had and whose had not been suspended and Government agreed to that.

Q.—When did you propose that?

A.—On the 30th of June 1900.

Q.—It comes to this that you proposed a large suspension of revenue and that the Government did not consider the circumstances so serious as to call for such a suspension of revenue: that it directed you to revise your estimate and make inquiries to ascertain whether your estimate or theirs was the correct one. What percentage of the revenue was ultimately suspended?

A.—Seventeen and a half lakhs were collected in the four districts.

Q.—What is the percentage of non-collection?

A.—72 per cent.

Q.—The gross result is that these inquiries ended by force of circumstances in a suspension of 72 per cent.?

A.—Yes.

Q.—All that period that inquiries went on these people were under the impression that they had to pay the revenue?

A.—As a matter of fact I think they believed it. It was hanging over their heads.

Q.—Now it has been said to me that the fear of having to pay up revenue in that way discountenances exertions in the way of well-digging or sowing; that persons were unwilling to dig wells because if there was a crop of fodder or *karbi* the *mamlatdár* might come and sweep off the revenue for Government?

A.—I issued an order that no one who put his land under a fodder crop should be called upon to pay assessment.

Q.—Then there is no foundation for that statement? I thought it unlikely.

A.—No; I issued that order quite early in the year.

Q.—Now we come to the question of works; you had test works and they assumed a very subordinate position; they are only interesting in regard to the method of payment adopted on them; the method of payment was the payment by results with permission to draw 25 per cent. over the Code maximum. We have been told that the people were not able to make a living upon that, and then they were converted into the Code task system: is that so?

A.—Yes.

Q.—Did it occur to the authorities here to attach kitchens and the payment of doles to dependants while maintaining the payment by results system?

A.—It was done in some cases.

Q.—Just so, in one district. Do you think it was a successful experiment?

A.—Yes; I think it was.

Q.—If the same thing had been done in the other districts and the people taken while they came on, do you think it would have sufficed to afford sufficient relief on all the works in Gujrat?

A.—I think it would have been a good intermediate step. I don't think it would have saved the introducing of the Code task system when the famine became acute.

Q.—Taken sufficiently early it is said to prevent the advent of that state of things which would require the introduction of the Code task system?

A.—In some localities there is a large class of people who are said to be incapable of sustained exertion; these people are discouraged if they find they cannot get a living in a day's work, and they go away and sometimes don't return.

Q.—Do you think that might be arranged by adjusting the task to their capacity in the commencement?

A.—I think the task would often then have to be reduced to an extent which would make it open to the objection to a minimum wage.

Q.—You only do it for a time?

A.—It might be possible, but it would require very careful and intelligent supervision, far superior to anything we had, and a large establishment.

Q.—What steps did you take to strengthen your establishments?

A.—Very early in the year the staff of Circle Inspectors was largely added to. The point we worked to was to have a man for 15 villages, but it did not reach that in all districts.

Q.—Did you do anything in the way of strengthening your European staff? Did you ask the Bombay Government for more As-istant Collectors and Deputy Collectors?

A.—Yes, and they were sent. Staff Corps men were also given. But still we hadn't enough of them.

Q.—With regard to the association of local agency with yourself in the administration of village relief and in controlling village works, do you think more might have been done?

A.—It is a question of locality. In Broach for instance every *patel* can read and write, in the Panch Mahâls not 3 per cent. can sign their own names; they are absolutely useless on the whole.

Q.—Looking over the whole business, do you think local non-official agency, where education has spread, might have been more fully made use of?

A.—In some localities, not in all.

Q.—You had the *patel* and *telati*, you had the Circle Inspector, and a special *kárkun* given to the *mamlatdár* for relief purposes?

A.—Yes, a similar class of man to the *mamlatdár*.

Q.—I see it stated that in some instances the *mamlatdár* was relieved of his judicial functions in order to give him more time for his relief works?

A.—Almost invariably the general plan was to relieve him of office work and send him on tour on famine work.

Q.—Were the *kárkuns* employed for relief purposes or merely to relieve him of judicial work?

A.—Chiefly for that purpose.

Q.—It was said to us that the Circle Inspectors were not of the stamp you would like to have had. Was that the case?

A.—Many of them were not.

Q.—You suffered from that in your opinion?

A.—Yes.

Q.—How many extra officers had you?

A.—We had at the most, including Staff Corps men, about 40.

Q.—Were these Staff Corps officers placed at your disposal to be employed in the manner in which you liked, or were they given to the Public Works Department to be employed by them alone?

A.—In the Panch Mahâls they were given to the Public Works Department; they were placed under the Collectors e lsewhere.

Q.—Were these officers sent to the Commissioner with permission for him to employ them as he thought best?

A.—Generally they were.

Q.—There is another point. We find that it was possible that the Public Works Department considered that they were, if not by the strict letter of the Code, semi-independent or independent of the district administration; in practice they were, and in practice the District Officers considered they need not interfere with the Public Works business and Civil Officers merely saw to the hospitals and sanitary arrangements. Do you think, looking into the whole administration, that there was a feeling of that description?

A.—There was undoubtedly a mutual understanding to that effect.

Q.—That each man's functions were different from the other's?

A.—Yes.

Q.—Are you prepared to assent to the proposition that in time of famine you must have one man at the head of the administration?

A.—Certainly.

Q.—And that man must be the Collector?

A.—Yes.

Q.—And that the Public Works Department must be subordinate to him in connection with the famine relief.

A.—Yes.

Q.—And the Civil Officer should be placed under the Officer in Charge, whether Public Works or Civil Officer?

A.—Yes.

Q.—When the pressure on your test-works and your appreciation of things generally showed that the famine was upon you, you opened your Public Works relief works, and we have been told that in certain districts these works were not sufficient in number to induce the people to come to them, and that the distance operated to the exclusion of certain people, and compulsory residence had the same effect; and the result was that certain people, especially the Bhîls, clung to their homes until they became very emaciated. The question I want to ask is, do you think that in the commencement your Public Works were sufficiently numerous?

A.—The keynote of our action was in the Government Resolution of 20th September.

Q.—Should you have had one or two works in that area or more works scattered about?

A.—Undoubtedly more works scattered about nearer the homes of the people would have partially met the case of people unwilling to come to works.

Q.—I wish to ask whether it would have been wise to have had more works nearer the homes of the people until they had been induced to come generally, and then would it have been possible to concentrate your works and so have got them on to larger works?

A.—That question did not arise within the scope of our action.

Q.—Why?

A.—We considered ourselves precluded.

Q.—Am I to understand that the number of works in the district or *taluqa* was prescribed from above?

A.—The general line of policy to be followed was prescribed, that is the concentration on large works, not less than 15 miles from the farthest village.

Q.—Had you as Commissioner of the Division discretion to open relief works wherever you thought right?

A.—Subject to the general policy laid down for my guidance.

Q.—If you thought it right in travelling through the country when people were clinging to their homes and were in an emaciated state and were unable to go 15 miles to a relief work, was it within your discretion to open a work, say, seven miles away?

A.—I should have considered I was bound by the general policy laid down. I should not have considered myself justified in opening a work merely on account of distance.

Q.—I would refer to Mr. Monteath's criticism of the arrangements in Broach. What was the limit of your discretion as Commissioner of the Division? You say that the policy was that all large works were supposed to serve an area and that the most distant village should be 15 miles from the works, that is an area of 900 square miles?

A.—I don't mean to say that the order was that there should be only one work in 900 square miles. The general policy was understood to be to provide work at a fair distance so as to provide some test of the need for them.

Q.—Was there any standard laid down of the area which one work was to serve?

A.—There was no standard.

Q.—If you thought it necessary to open two works, say in an area of 300 square miles, would you have considered yourself precluded from opening them?

A.—It would have been done if one work was over-crowded and the necessity had arisen for another.

Q.—If there was no over-crowding would you have opened another work?

A.—Not unless the Collector reported its necessity for other reasons.

Q.—It is not merely a hypothetical position. The position is that in the Bhil country certain works were opened serving an area of 200 to 300 square miles, that the people were unaccustomed to work and could not be induced to go there; they clung to their villages until they died.

A.—That was an extreme case.

Q.—This would only be tested by an extreme case?

A.—Another reason was the difficulty of finding works in the early part of the year.

Q.—In a case of that description, people clinging to their villages until death overtakes them, the question is whether the Commissioner of the Division should be able without any further reference to open village works?

A.—The Commissioner is bound by the general lines of policy.

Q.—You did not, I understand, open a village work in these circumstances?

A.—No.

Q.—We were told yesterday by the officer from Baroda that the circumstances of the Broach works were so attractive, that the measurements were so exceedingly easy, that people were attracted from Baroda to the Broach works: he gave that as an explanation why immigrants came at that time in considerable numbers. Was there any such attractiveness, as far as you know, on the Broach works, and what was the reason why the number of people was so large?

A.—They were undoubtedly attractive, but not unduly so. In Kaira the Code task system had not been introduced.

Q.—Earlier than in the other districts?

A.—Certainly than in the adjoining district.

Q.—Was the Code system in force in Ahmedabad?

A.—Yes; on some works at least.

Q.—Was Broach competing with Ahmedabad for labour?

A.—Ahmedabad does not adjoin and would not have affected it; some Kaira people undoubtedly went into Broach.

Q.—Because the Code task system was in force in Broach and the piece-work in Kaira?

A.—Partly so, and partly because it is connected socially and has business relations with Kaira.

Q.—We have to account for the fact of 27 per cent. of population being on works in Broach in the month of February. Was there greater leniency?

A.—Perhaps more so than in Baroda, but not than elsewhere.

Q.—Has it anything to do with the currency?

A.—Baroda currency is at a heavy discount.

Q.—How did that work out if the payment was on the basis of grain? I don't suppose there is any difference in the price of grain?

A.—I don't see the difference. There were other points.

Q.—The other points would be the proximity of these works to people's houses?

A.—Undoubtedly.

Q.—Did that proximity to the people's houses strike you at an early period of the famine operations?

A.—I knew it would be a necessary consequence of the nature of the district

Q.—In your letter dated the 2nd January you called attention to the relief works in Broach and you foresaw this growth of people on the Broach works, and you proposed in January to deal with it by compulsory residence and by selection from the neighbouring villages; that is, a sort of distance test, and by the exclusion of immigrants. At that time did it strike you that it would be desirable to close some of the works and impose a distance test?

A.—No. In May when I saw the tanks I did not think it was necessary to take very stringent measures.

Q.—Why?

A.—Because the great mass of the people were needy people.

Q.—How do you reconcile that with your action in January in wishing to exclude some people?

A.—I did wish to exclude some, but not the mass; the Borah cultivators are the only people of whom it can be said that they came on works without being forced to do so.

Q.—What percentage of people could have done without relief?

A.—In some cases there were none, but at Ramchera there were many Borahs who had no real cause to come.

Q.—Had your orders of January been carried out?

A.—As a matter of fact from the tank near Broach several hundred Borahs were drafted off, with the result that they returned to their villages.

Q.—The numbers on works in Broach fell largely in March, we have been told, on account of the orders of Mr. Monteath. We have been told also that a number of people were transferred to Baroda. Do you know whether any of the people who left the Broach works on account of these orders went to other works and to other districts, or do you think they all disappeared to their homes?

A.—Some of the Kaira people returned to Kaira, but not the others.

Q.—We have been told by Mr. Wood that the effect of these orders was injurious, so far as he saw, in the district. Did you yourself notice any evil result?

A.—I hadn't much opportunity of seeing the people.

Q.—I endeavoured to find out from the mortuary statistics whether any result was apparent; if so, it did not immediately declare itself. From the statistics of the Broach district the inference would seem to be that there was a considerable number of people on works who might have done without relief?

A.—Undoubtedly most of them had some little resources. Those who left would be paid up to date, and that would give them some money to go on with. No one would be left absolutely without food: the effect of the reduction would be a general running down.

Q.—And that would make itself felt in later months?

A.—Yes.

Q.—And then cholera came in the months when it might have made itself felt, and that obliterated all smaller effects?

A.—Yes.

Q.—The general impression seems to be that in all your districts, except Broach, the difficulty was not in excluding people from the works, but in getting people who were in need to come to your works?

A.—Precisely.

Q.—Well, does that not point to the conclusion that the works were too few?

A.—Undoubtedly they were too few in some localities. I doubt if in Ahmedabad or Broach they were too few.

Q.—Up to April there was not a very great extension—in fact in some districts very little—in the way of village gratuitous relief, and it was said by the Deputy Sanitary Commissioner that that non-extension contributed a good deal to the mortality which ensued. In Broach at the end of April you had 5,939 people on gratuitous relief, which was 1·73 per cent. of the population; in Kaira 11,024, or 1·26 per cent. of the population; in Ahmedabad 11,000, which was ·34 per cent. of the population; in the Panch Mahâls 3,729, or ·25 per cent. of the population. It would seem from these figures that it was inadequate. Would you explain if there is any reason for that, or give your opinion as to whether it was inadequate or not?

A.—As a matter of fact I think the course of gratuitous relief was very much affected by an order which was passed on the 18th of November by Government. The Collector of Kaira reported that the amount sanctioned for gratuitous relief was nearly exhausted and asked for nearly Rs. 30,000 more. I, as Commissioner, wired recommending the grant, and Government replied that the amount seemed altogether excessive, and that the relief should be given to a ratio of the numbers on works. My own opinion is that these orders were perfectly reasonable; but there is no doubt that the effect when circulated to the Collectors was to make them draw in their arrangements.

Q.—The position then is this, that in the districts of the Panch Mahâls and Kaira, where your system of public works failed to draw any people to them, your percentage of village relief was *nil*. If you had no workers in the Panch Mahâls you would have no gratuitous relief: that is the result. Is that not the result, that if the people keep away from the works for any reason, and if they remain starving in their villages, that principle of percentage precludes you from putting them on gratuitous relief in the village?

A.—Undoubtedly.

Q.—You deny the people an opportunity of coming upon relief works by not bringing works near them and make that denial a ground for refusing gratuitous relief?

A.—I wish to say a few words about the Panch Mahâls. In my opinion the extension of gratuitous relief would have been highly dangerous and probably unnecessary. In the Panch Mahâls the people had to begin with some more *khurîf* than in any other district. In Dohad they had some grass and there was some meat, and there was plenty of jungle produce; in fact the difficulty was not that the people could not get food, but that they could not get wholesome food.

Q.—Again, when officers dealt with the Bhîls in a tactful way we find that they came to works?

A.—That is the difficulty: we hadn't a sufficient supply of officers. We had to take things as they were: our staff as it was and the Bhîls as they were; if we had extended gratuitous relief the failure would have been still greater. There is a worse evil than starvation, and that is the loss of self-reliance and of self-respect.

Q.—When you enter upon a campaign of famine relief your first object is to save life, and to look after demoralization after. What is the good of preserving the self-respect of the dead? Is that the explanation? The scant administra ion of gratuitous relief in the early part up to the rains, which, according to your Deputy Sanitary Commissioner, is the great cause of the mortality in these four districts?

A.—I don't agree with the Deputy Sanitary Commissioner in the way he has put it.

Q.—Well, on the whole you consider that the public works, having regard to the necessities, were too few, and in so far they were defective; but do you think that the system on which they were managed was good?

A.—Yes.

Q.—And effective?

A.—I think so.

Q.—We have been told that the Public Works subordinates were not such as the superior officers would like to have, and also that many complaints were made in the way of short payments, but that when these complaints were brought to the test they were not always verified?

A.—I may say I heard many complaints and inquired into them; I never found them come to anything.

Q.—Now we come to the cholera scare. Do you agree with the view that at such a time the workers should be sub-divided into manageable bodies of five and six thousand to be marched off to different parts with a view to getting rid of the cholera?

A.—I don't think it would do. There is no more unmanageable person than a low caste Gujrati in a time of panic.

Q.—What is the alternative?

A.—Let them go.

Q.—To their homes?

A.—I am convinced that dispersion is one of the best means you can employ.

Q.—And carry disease with them?

A.—As a matter of fact disease disappeared very quickly after that.

Q.—Would they not carry disease into regions in which it did not exist?

A.—No more than keeping them together in gangs would have nursed the infection.

Q.—Do you think the wage scale was excessive?

A.—No, except in the Panch Mahâls, and there only because the people had so much else with which to supplement their food.

Q.—In the Panch Mahâls was it not practically reduced by fixing the wages at one anna, irrespective of the price of grain?

A.—It was nine pies.

Q.—Was one anna never given?

A.—Nine pies was the minimum rate fixed.

Q.—Do you think your difficulties were very sensibly increased by immigration from Native States?

A.—Undoubtedly.

Q.—What proportion of your death-rate would you attribute to that cause?

A.—I should be very reluctant to say.

Q.—In talking with your officers what was the general impression as to the proportion of your mortality due to immigrants?

A.—I should say 50 per cent.; in the Panch Mahâls I should say considerably more.

Q.—We have been told that the cultivators of Gujrat are indebted. One officer has divided them into three classes; he said 25 per cent. were hopelessly indebted: 10 to 15 per cent. were free from debt, and the balance were more or less in debt. Is that your general view?

A.—It is not obviously incorrect; circumstances vary from district to district,

Q.—Is it your experience that the ordinary cultivator saves from a good year to pay his revenue in a bad one?

A.—No.

Q.—That being so, the strict enforcement of the revenue in a year of substantial failure presses very hardly and drives him into debt? Do you think it would be advisable that there should be incorporated in your Bombay Revenue system provision for the suspension of the Government demand in years of substantial crop failure?

A.—I do.

Q.—Would your suspensions in years of substantial crop failure be uniform over a large tract in which there had been failure, or would it follow the individual's circumstances, and would your suspension exclude the money-lender?

A.—I should certainly abstain from individual inquiry. I should make suspensions or remissions by the area. I should in the first year of failure collect from the *saukár*.

Q.—If your Revenue Intelligence Department advised you that the crop of, say, 40 villages had failed to the extent of 12 annas, would you then over that area give a uniform suspension of revenue, keeping for a later period the question of remission?

A.—Yes.

Q.—When it was a question of remission, would you look into the circumstances of the individual?

A—Yes.

Q.—And in the case of a *rayat* who was unable to pay, you would remit?

A.—Yes.

Q.—And in the case of a *saukár* you would recover?

A.—Yes, I would make recovery of arrears dependent on the crop of the current year.

Q.—You are at all events in favour of the policy as an integral part of your system not merely in a year of famine, but also in a year of substantial failure?

A—Yes.

Q.—Do you think there is any hope in Gujrat of a policy of credit associations or village banks?

A.—It is worth trying, but very difficult. The Gujrati can borrow money from the *bania* for genuine improvements at 6 per cent.

Mr. Nicholson.—Would you be inclined to add, as another reason for the depletion of the grain stock at the beginning of the famine, that the people had largely parted with their grain on account of panic over plague?

A.—Only in certain localities. In Kaira there was a great panic, and that undoubtedly was the case. There was no great panic in Ahmedabad.

Q.—People didn't then keep enough to carry them on to the next harvest?

A.—No.

Q.—I believe you had a considerable number of deserted children in your district?

A.—Yes.

Q.—In January an order was passed directing that a complete register should be kept of the deserted children and orphans?

A.—Arrangements were made for that, but I cannot quite remember.

Q.—The orders were that a complete register should be kept by the *mamlatdár* for each *taluqa* of all children under 12 who had been deserted and orphans under 12. Do you remember that?

A.—Yes.

Q.—Were these records kept?

A.—So far as I know they have been kept.

Q.—So that by referring to the various *mamlatdárs* we shall be able to trace the history of every deserted child who was picked up by the wayside or taken from a poorhouse?

A.—I cannot say.

Q.—That was the order. Don't you think the order was carried out?

A.—It probably was.

Q.—As you found a great number of children on your hands, you found their maintenance was a considerable burden on Government and possibly poorhouses were not the best place for them, and you permitted their being drafted to various institutions?

A.—Yes.

Q.—Hindu Institutions?

A.—Yes, to many institutions: lives were saved in that way.

Q.—There is a great institution here which took over a thousand?

A.—Yes.

Q.—And many were handed over to missionary institutions?

A.—Yes.

Q.—Under what conditions?

A.—One condition was that the child should be returned if the relative made good his claim.

Q.—Was there any condition that until it was quite certain that the children were absolute orphans, every care should be taken that no loss of caste should occur?

A.—Yes. It was not practicable, ecause all the children were of very low caste.

Q.—That was formulated to Collectors. You have reason to believe, I presume, that the orders were carried out?

A.—Yes.

Q.—Was there any order that they should not be removed from the district?

A.—Yes.

Q.—Did you take any precautions to see that these orders were carried out?

A.—Yes; rather severe precautions.

Q.—At each orphanage maintained by Government was a register kept showing all admissions of children?

A.—Yes.

Q.—And would the register show the removal of children?

A.—I should doubt that.

Q.—Say there is a particular orphanage, and on a certain day there are 250 children: somebody comes and takes away 150: could the place to which they were taken and the person who took them away be traced from the register?

A.—It should be, but whether it is the case I cannot say; no specific orders were ever issued by me.

Q.—I presume you agree that as a matter of business it should be done?

A.—Yes.

Q.—If A, B, C, are taken away the register would show—Removed by so-and-so on such-and-such a date?

A.—It should show it.

Q.—Do you think these (North-Western Provinces rules handed over) should be added to the Bombay Code?

A.—I think that private institutions are better than Government institutions.

Q.—Otherwise you think they would be a good addition to the Bombay Code?

A.—Yes.

Q.—Have you many children still on hand?

A.—No, very few.

Q.—Would you endeavour to try and keep cattle in the villages under the care of their owners?

A.—Yes; certainly.

Q.—And would you give gratuitous relief to those who stayed in the village to look after the cattle?

A.—Yes.

The President.—Do I understand you to say that during the course of famine you would hand over orphans to the care of private institutions?

A.—Yes.

Q.—Missionary institutions principally?

A.—Yes.

Q.—Would not that be rather opposed to native feeling? Would it not come to this, that children handed over to missions might be removed from the district and taken away to other parts of the country before it was found out whether they were orphans or not?

A.—I should bind the missionaries not to do that. I think that private agency is better than official.

Q.—Would you have native feeling in your favour?

A.—I don't think reasonable native feeling would be against it.

Q.—The Muhammadan population would not like to have their children handed over to Hindus or the Hindus to Muhammadans?

A.—Most of the orphans were of very low caste.

Mr. Nicholson.—I find that Government issued an order directing that children should not be removed from their districts?

Mr. Bourdillon.—As regards the question of wages, what was your system for fixing the price on which the wage scale was based? Who was authorized to vary it?

A.—The *mamlatdár* gave the schedule from time to time.

Q.—If any change was thought necessary was the Collector authorized to vary the basis?

A.—The Public Works Department would do it on the *mamlatdár's* report.

Q.—Do you think that worked satisfactorily?

A.—Yes, I think so. The rule was thoroughly understood.

Q.—Do you think that the tasks laid down in the Code are fair?

A.—I never had reason to suppose otherwise.

Q.—Most of the able-bodied could do the task, if they intended to do it, without much trouble?

A.—Yes.

Q.—You would not change it?

A.—No.

Q.—With reference to what you say in your written evidence as regards the power of fining, in what respect did you find it dangerous?

A.—The ordinary subordinate would fine too promiscuously, without reference to the physical condition of workers.

Q.—And that could be aggravated if they were short-handed?

A.—Yes.

Q.—As a matter of fact did that happen while the piece-work system was in vogue?

A.—Yes, I have not the least doubt about it.

Q.—Do you think that fining was enforced with an imperfect measurement of tasks?

A.—I cannot say.

Q.—As regards section 57 of your Code, who is the ultimate authority who makes out the gratuitous relief list?

A.—In the early part of the year it was the Circle Inspector, later on the *patels*.

Q.—Would it be a good plan to call in the village men to help the Circle Inspector?

A.—The general opinion was that they were either totally callous to the suffering of those who did not belong to the village, or else they went to the other extreme and put everybody on the list.

Q.—You extended your village dole lists and they were checked by officers going round?

A.—Yes.

Mr. Nicholson.—Did you have many complaints about the inability of railways to meet demands?

A.—Yes, that was the constant difficulty.

Q.—There was no difficulty about grain?

A.—No.

Q.—But the fodder difficulty was the great one?

A.—Yes.

Q.—Did you find that railways were much more ready to take hides of dead cattle than to bring grass and food to living ones?

A.—They did not compete: the traffic was not the same way.

Q.—I gather that you are not in favour of drafting people; you said that you don't believe in organized establishments for separate bodies?

A.—Not in time of panic: otherwise it would be a good thing.

Q.—Do you think that drafting is useful if you want to move 5,000 from one camp to another, but not so much as a device to get rid of them?

A.—Yes.

Q.—Was there not a system of weeding out instead of drafting?

A.—Unless you have the staff that would be extremely dangerous.

Q.—If you had the staff it would have been better to weed out those not really in want?

A.—It could have been done in Broach. There was no difficulty in discriminating those who wanted to come for pocket-money.

Rao Bahádur Syam Sundar Lal.—As regards the Indian Famine Charitable Relief Fund, I find that most of the money has been given to cultivators, and that artizans and orphans have been altogether neglected?

A.—Very few artizans have been affected, and the question of orphans is a separate one. I should say every penny given to the cultivator is rightly given; he is the man we chiefly want to re-instate

Q.—As regards relief to respectable people and *parda-nashin* women, was there any scope for giving relief to them?

A.—I know a good deal of money was given from private funds.

Q.—I am talking about the Charitable Relief Fund?

A.—I think a certain amount of the Mansion House Fund was given for that purpose.

Q.—Do you think it is not practicable to get any work out of *parda-nashin* women?

A.—No.

Q.—On the Jandola tank there were people from Jodhpur. Were steps taken to return them?

A.—Yes, in the beginning of September they were all sent back to Márwár.

The President.—Could you advise the Commission as to the best method of dealing with immigration?

A.—I would place all the smaller (at least) Native States in a Political Agency more directly under the Political Agent, and make him more responsible for central administration.

Q.—Those whom you could recognise as being subjects of the States you would return?

A.—Yes.

The witness subsequently wrote:—

In returning the proof of my answers before the Famine Commission I cannot help saying that the method of examination by questions and answers does not lend itself to a fair representation of views on any subject at all complex.

I note this especially in the answers at A, and ask leave to substitute or at least append a brief statement as follows:—

Q.—Was there no declaration of a suspension?

A.—No. The following is briefly what happened. In Government Resolution of 9th October the Commissioner was ordered to restrict and regulate suspensions on the basis of a maximum suspension of 20 per cent. In Government Resolution of 16th January "Government with some confidence expect that Gujrat will pay as large a share of the revenue this year as the Deccan did in 1896-97 (that is 80 per cent.) if the orders are applied in a reasonable manner." In January, therefore, the village establishments set about compiling statements of those who should and those who should not be served with notices to pay—the former including, under the rules, all non-agriculturist holders and all agriculturists who were well-to-do

or who, not being well-to-do, had got a crop of four annas or over. Government Orders were emphatic against coercion being used to recover from an occupant, assessment which he could not pay out of resources other than those needed for the resumption of agricultural operations.

These statements were not completed till very late in the year. Meanwhile there was no definite intimation to the people as to which individuals would be expected to pay and which would not. The demand was kept in the air. It is not meant that any harshness was used. In some places it is true large numbers of notices were issued, for many persons were entered by the village officers as able to pay who were not able; but the notices were seldom followed up to distraint or forfeiture. There was, however, the usual dunning, which is a mild but effective form of pressure in native life, and was practised with less or more assiduity according as the village or *taluqa* officials were imbued with the idea that Government expected them to collect something like 80 per cent. Once that impression became fixed, no orders from merely local officers would do away with it. Large numbers escaped both service of notice and dunning, and were simply left alone, but they received no definite assurance of freedom from demand until nearly the close of the revenue year.

At B is an off-hand statement which I wish to modify by the substitution of "doubt if" for "think". As a matter of fact the lower and middle class of cultivators could not have really believed they would have to pay, because they were conscious of not having the money.

At C an answer which I consider important has not been fully reported. I ask that the following may be substituted:—

Q.—Again, when officers dealt with the Bhíls in a tactful way, we find that they came to work?

A.—That was a difficulty; we had not a sufficient supply of officers. A few stragglers on the fringe of the village population coming under section 57 of the Famine Code were provided for in the works, kitchens, and on dole. The rest had food, but it was unwholesome food. They were able-bodied; but many would not go to work. To have fed their wives and children would have been feeding them, for they would have stayed at home and shared in the pittance. The whole population would have sat in their villages and waited for Government to feed them with a spoon. The worst evil that can befall a people is the loss of self-reliance and self-respect. Our modern famine relief will slowly break down the national character unless we cling to the good old maxim that he that will not work neither shall he eat. The right course last year would in my opinion not have been extension of village dole, but multiplication of works in certain parts under a much larger and better establishment to secure against abuse than we had. Many would still have died; but they would have died by their own hand, or by the shock of famine on the unaccustomed Gujrati, which no human agency could counteract.

The Honourable F. S. P. Lely, C.S.I., I.C.S.

Answers by the Honourable F. S. P. Lely, C.S.I., I. C. S., Commissioner, Northern Division, to the questions drawn up by the Famine Commission.

Preliminary.

I do not propose to answer in detail all these questions. They are based on the district as a unit and local variations can be most conveniently and accurately described by the district officers. Their answers have gone direct to Government and I have not yet received the Collectors' Famine Reports, so I only write from general memory and knowledge.

To my mind a chief lesson of last year's famine is the impossibility of treating all classes of people and all localities by a uniform and rigid code of rules. Even within the limited area of the four badly distressed districts* of British Gujarát the diversities are great. Take for instance the amount of wage, the right settlement of which is so much desired. In the Panch Mahâls the Bhil and Koli did not ask for more than an anna a day paid every evening. He got meat and jungle products on his own account, and even with them was accustomed to a sparer diet than the labourers of Broach, who ordinarily earn five annas per day in the hot weather and eat it, and who in time of famine have no extras to supplement the Government wage. No one scale will suit both these populations. One man's meat is another man's starvation. Again within the single district (say) of Kaira there are the Dheds and Ods (professional diggers) who would readily tramp off 20 miles from home and do a good day's work until corrupted by the minimum wage; the graziers and weavers who are also ready to work but have never handled a spade; and a large class who stuck to their homes and absolutely refused to go to work, some (the Thákurs, &c.) from social pride, some (the Dharálas, &c.) from sheer apathy and laziness. The Bhil of Ankleshvar will work; the Bhil of Dohad will often die sooner. Even in the same place and among the same people 10 oz. of food per day may do for the average child of 7; but a robust child of that age will eat a pound, while a small and sickly child will not eat ¼th pound.

* Ahmedabad, Kaira, Panch Mahâls, Broach.

An inference is that when famine arises the first condition for complete success in meeting it is a Collector in every dsirtict who knows something of the idiosyncracies of his people. He will then also be trusted by them if he is an average Englishman, which is another advantage. As a matter of fact, in September 1899 three out of the four Collectors of the most distressed

Mr. Quin took charge in Karia on 15th September 1899.
Mr. Stewart in Panch Mahâls on 18th September 1899.
Mr. Panse in Broach on 30th October 1899.

Districts of Gujarát were new. It would be out of place to suggest how these frequent changes which are the curse of modern administration could have been avoided, if they could have been. I only note a distinct element of weakness which made itself felt.

1. The outlook was most promising. The monsoon broke about the middle of June and good rain (average 5·84 against 6·13) fell in the second and third weeks, which was sufficient and seasonable for *kharif* sowing. July and August passed practically without rain, except in a few places, where it amounted to between an inch and two. The character of the *harvest* in the two preceding seasons was as follows :—

The good season of 1897-98 was some relief to the agriculturists after a succession of six unfavourable ones. In Ahmedabad and Kaira the later rains affected the quality of wheat and *bájri*, but this was compensated by a greater outturn. In the Panch Mahals the rainfall, though less, was seasonable and well distributed, but the *rabi* crops suffered on account of the comparatively early close of the monsoon. Hence the yield of rice was deficient and the *mahura* crop was poor. In Broach all the crops were excellent except wheat, which, though greater in quantity than in the preceding year, was only sufficient for local consumption. In Surat the state of things was also good. The rainfall, though somewhat below the average, was seasonable and sufficient, and the crops were generally excellent. The year would have proved very prosperous, but for the plague and its attendant evils.

The season of 1898-99 promised well at first; the rains, however, proved insufficient in August and ceased almost entirely after a heavy fall in September. The kharif and rabi crops were generally good, but uneven distribution of rain affected them in some places in the Ahmedabad District, where the yield of wheat and bájri amounted to six and three annas (respectively) only in the rupee. The rabi crops in Broach and other places were damaged by frost in the latter part of winter, while in Kaira the yield of bájri was excellent. The uneven distribution of rain affected the wheat and rice in Surat also. But the prevailing prices were very low as in the preceding year.

3. The following statement shows the rainfall in the Gujarát Districts of the Northern Division during the season of 1899 as compared with the average of 11 years ending 1897. The average rainfall in the four severely affected districts during 1899 was 7·78 against 34·80, or less than one-fourth of the usual average. The rains may be said to have ceased in June, for there was practically no rain after the first fall in that month :—

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Statement showing the average Rainfall of 11 years (1888—1898) and that of 1899.

No.	District.	June.		July.		August.		September.		October.		Total.	
		Average of 11 years.	1899.	Average of 11 years.	1899.	Average of 11 years.	1899.	Average of 11 years.	1899.	Average of 11 years.	1899.	Average of 11 years.	1899.
		In. c.	In. c.	In. c.	In. c.	In. c.	In. c.	In. c.	In. c.	In. c.	In. c.	In. c.	In. c.
1	Ahmedabad	5 06	4 33	12 11	0 19	7 41	0 47	4 44	0 93	0 59	0 04	29 61	5 96
2	Kaira	6 03	4 61	14 82	0 52	9 95	0 04	5 13	1 30	0 73	0 03	36 66	6 50
3	Panch Mahâls	5 71	6 57	13 09	1 15	10 84	0 12	5 87	1 58	1 12	0 03	36 63	9 45
4	Broach...	7 82	7 86	15 39	0 42	7 00	0 37	4 75	0 57	1 41	0 01	36 37	9 23
	Average of the 4 severely affected districts	6 15	5 84	13 85	0 57	8 80	0 25	5 05	1 09	0 96	0 03	34 80	7 78
5	Surat	10 67	16 38	25 24	1 06	10 54	2 21	7 10	0 69	1 50	...	55 05	20 34
	Average of the Gujarát Districts	7 06	7 95	16 13	0 67	9 15	0 64	5 49	1 01	2 07	0 02	38 86	10 29

4. Probably not five per cent. in the four severely distressed districts. There was practically no kharif crop in those districts.

5. The following are the statistics upon which the percentages required are based. They are taken from the Census figures. The percentages are added below :—

	Ahmedabad.	Kaira.	Panch Mahâls.	Broach.	Surat.	Total.
Population...	921,712	871,589	313,417	341,490	649,989	3,098,197
(*a*) Land occupants	183,284	297,521	165,770	92,761	224,158	963,494
Tenants and Sharers	147,946	222,371	48,036	51,112	26,503	495,968
Total ...	331,230	519,892	213,806	143,873	250,661	1,459,462
(*b*) Farm Servants	14,437	9,472	9,895	10,658	16,109	60,571
Field Labourers	89,273	56,970	6,852	44,246	125,006	322,347
Total ...	103,710	66,442	16,747	54,904	141,115	382,918
(*c*) Cattle-breeders	4,654	2,042	1,275	201	50	8,122
Herdsmen	14,383	5,309	1,983	1,029	3,363	26,067
Total ...	19,037	7,351	3,258	1,230	3,413	34,289
Grand Total ...	453,977	593,685	233,811	200,007	395,189	1,876,669
Percentage of Grand Total on the total population of the District.	49·25	68·11	74·6	58·56	60 79	59·7
Percentage on the total population of the district of—						
(*a*)	35·9	59 6	68·2	42·1	38 5	47·11
(*b*)	11·2	7·6	5·3	16·1	21·7	12 4
(*c*)	2·05	0·84	1·03	0·4	0·5	1·1

6, 7, 9. The truth is, no one living in this part of India in 1899 had ever seen real famine or regarded it as a possibility. The last that had occurred in A.D. 1813, Samvat 1869, was a mere tradition among the people and had left no trace except a popular phrase. "A man of 69" meant a strong

and lawless man who took all he could get from those weaker than himself. In 1892 when the orders of the Government of India for the maintenance of a programme were being discussed it was actually proposed by the then Director of Land Records and by the then Commissioner, Northern Division, to exclude both Gujarát and the Konkan (including Thána District in this Division) from Form C on the ground of being "secure against famine." It was only on the warning voice of the late Mr. Little, then Chief Engineer, that Gujarát was included, only Thána being excluded. Thus a programme was annually drawn up and submitted, but it was never taken quite seriously. Indeed the Commissioner, Mr. Spence, in 1892 went so far as to say that it would not be possible to prepare one that would more than "cover the number that experience has shown as likely to require relief under the ordinary conditions that have been found to prevail when scarcity has unfortunately attacked Gujarát." In other words, absolute famine such as has occurred was not contemplated.

According to the programme sanctioned for 1899, plans and estimates were ready for only about 33 per cent. of the works. About 14 per cent. more had been surveyed and plans and estimates were still in abeyance. No scales of establishment were included nor lists of candidates kept up. The latter would, in my opinion, have been quite unnecessary and moreover inconvenient as giving rise to claims for employment, famine or no famine.

The programme was in practice defective in other respects. Some of the works could not be put in hand because of want of drinking water. Some were on further consideration of doubtful utility. Above all there was an excessive number of roads which are expensive to make in Gujarát and are a sheer waste of money unless provision can be made for future up-keep. The Local Boards were already saddled with more roadways than they could maintain.

There was not much harm done at any rate in Ahmedabad, Kaira and Broach, for the Public Works Department Officers set to work with a will. The numerous irrigation tanks in Ahmedabad and Kaira came in useful, for a yearly grant for repairs of them is made and plans and estimates had been prepared for a large number, though not nominally for famine use. It has been acknowledged by all authorities from the Secretary of State downwards that Government is bound to keep these tanks in repair in return for the water rate they levy. The matured programme works also in Ahmedabad, Broach and Kaira comprized some drainage channels and tanks which were excellent to begin with. In the Panch Mahâls only was there serious defect, caused partly by there being in that district no separate Executive Engineer. The Public Works Department proposed 6 road works, none of which could by any possibility be kept up except in the very unlikely event of Government accepting them as a Provincial charge.

The only irrigation work they would admit was one tank on which Rs. 5,000 could be spent. Work was commenced on the Sunth Road on September 18th by the Civil authorities without waiting for the Engineer and on the Dohad-Limbdi Road on September 11th; but on October 4th the Collector reports that on visiting it with the Executive Engineer "we found absolute confusion prevailing, people getting full wages for scarcely any work at all. We were obliged to put them on piece-work and almost all left." For reasons referred to in the answers to questions 52 to 59 these works were not enough even when the Dohad-Ali Rájpur Road, the Hálol Road and the Baroda Chord Railway were added in October. The Commissioner never ceased to urge that in this district (as indeed in the others) tanks were in every way preferable to long lengths of new road. In the eastern tract of the Panch Maháls he had no doubt there were many promising sites for storage reservoirs. Government was pleased to appoint an Engineer to prospect for them in February 1900, but the work was never strenuously taken up and fell through. The Baroda-Godhra Chord Railway and a few village tanks helped the district. The district for which a future programme will be most difficult is Broach. In its black soil road embankments are specially futile and irrigation is not practised.

As noted above, the Thána District was without a programme at all at the beginning of the year. One was drawn up under the orders of Government, and sanctioned by them on 5th October 1899, but it was never really called into play. Nine only of the 40 works it contained were ever begun.

10. The relief programme contemplated mainly large works. There was a clubbed item of so many village tanks for each district and in one district a general item of clearing land of scrub and weeds, but there were no definite proposals ready in reserve.

13. Yes, the first application for an additional grant for loans was made as early as August 1899 and was promptly granted by Government. In the appended statement the amounts advanced from the beginning of the famine till the end of March 1900 are given, *i.e.*, from August 1899 till March 1900. Two divisions are made to show the advances given between August and December 1899 and from January to March 1900. The statement also shows the extent to which the advances were made under the Land Improvement and Agriculturists' Loans Acts, and the objects for which they were given.

The conditions were those prescribed in the two Acts and the rules thereunder, and no special orders were given as to the classes of persons to whom the advances were to be granted. All cultivators who applied and were eligible for advances under the rules were given them. They were recoverable in whole by instalments as fixed by the officers granting the advances in accordance with the rules.

Statement showing the Amount of Takávi Advances made from the beginning of Famine till the end of March 1900.

District.	Period.	Under the Land Improvement Loans Act.			Under the Takávi Rules framed udner Act XII of 1884.					
		For wells.	For other improvements.	Total.	For seed.	For Plough cattle.	For fodder.	For subsistence.	For other purposes.	Total.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Ahmedabad District	Up to end of December 1899	88,018 0 0	2,700 0 0	90,718 0 0	1,34,526 3 0	9,064 8 0	14,313 0 0	1,170 0 0	1,15,200 7 4	2,74,274 2 4
	From January to March 1900 ...	32,133 0 0	.....	32,133 0 0	4,452 0 0	150 0 0	10,154 8 0	520 0 0	1,580 13 0	16,857 5 0
	Up to end of March 1900	1,20,151 0 0	2,700 0 0	1,22,851 0 0	1,38,978 3 0	9,214 8 0	24,467 8 0	1,690 0 0	1,16,781 4 4	2,91,131 7 4
Kaira District ...	Up to end of December 1899	66,567 0 0	12,375 0 0	78,942 0 0	8,569 0 0	14,337 0 0	50 0 0	.....	73,982 12 0	96.938 12 0
	From January to March 1900 ...	81,597 4 0	4 260 0 0	85.857 4. 0	1,187 0 0	12,132 8 0	1,327 0 0	50 0 0	31,776 8 0	46,473 0 0
	Up to end of March 1900	1,48,164 4 0	16,635 0 0	1,64,799 4 0	9,756 0 0	26,469 8 0	1,377 0 0	50 0 0	1,05,759 4 0	1,43,411 12 0
Panch Mahals District	Up to end of December 1899... ...	6,246 0 0	445 0 0	6,691 0 0	220 0 0	334 0 0	350 0 0	.....	29,381 0 0	30,285 0 0
	From January to March 1900 ...	8,114 0 0	727 0 0	8,841 0 0	25 0 0	25 0 0	45 0 0	50 0 0	7,567 0 0	7,712 0 0
	Up to end of March 1900	14,360 0 0	1,172 0 0	15,532 0 0	245 0 0	359 0 0	395 0 0	50 0 0	36,948 0 0	37,997 0 0
Broach District ...	Up to end of December 1899	76,715 0 0	.....	76,715 0 0	50,925 0 0	16,975 0 0	71,922 8 0	190 0 0	75,392 12 0	2,15,405 4 0
	From January to March 1900 ...	61,507 8 0	40 0 0	61,547 8 0	5,888 0 0	65 0 0	82,435 0 0	50 0 0	3,991 0 0	92,429 0 0
	Up to end of March 1900	1,38,222 8 0	40 0 0	1,38,262 8 0	56,813 0 0	17,040 0 0	1,54,357 8 0	240 0 0	79,383 12 0	3,07 834 4 0
Surat District ...	Up to end of December 1899... ...	6,900 0 0	816 0 0	7,716 0 0	200 0 0	955 0 0	.....	.....	1,570 0 0	2,725 0 0
	From January to March 1900 ...	72,910 0 0	54,771 0 0	1,27,681 0 0	4,577 0 0	20,490 0 0	1,334 0 0	.....	10 030 0 0	36,431 0 0
	Up to end of March 1900	79.810 0 0	55,587 0 0	1,35,397 0 0	4,777 0 0	21,445 0 0	1,334 0 0	.....	11,600 0 0	39,156 0 0
Thána District ...	Up to end of December 1899	.....	.....	.....	.....	.....	.....	.....	.. ...	.....
	From January to March 1900 ...	2,270 0 0	26,130 0 0	28,400 0 0	922 0 0	700 0 0	.....	158 0 0	25 0 0	1,805 0 0
	Up to end of March 1900	2,270 0 0	26,130 0 0	28,400 0 0	922 0 0	700 0 0	.. ...	158 0 0	25 0 0	1,805 0 0
Total ...	Up to end of December 1899	2,44,446 0 0	16,336 0 0	2,60,782 0 0	1,94,440 3 0	41,665 8 0	86,635 8 0	1,360 0 0	2,95,526 15 4	6,19,628 2 4
	From January to March 1900 ...	2,58,531 12 0	85,928 0 0	3,44,459 12 0	17,051 0 0	33,562 8 0	95,295 8 0	828 0 0	54,970 5 0	2,01,707 5 0
	Total up to end of March 1900 ...	5,02,977 12 0	1,02,264 0 0	6,05,241 12 0	2,11,491 3 0	75,228 0 0	1,81,931 0 0	2,188 0 0	3,50,497 4 4	8,21,335 7 4

		Rs.	a.	p.	
Advances under Land Improvement Act	...	6,05,241	12	0	At the end of March 1900.
Advances under Agriculturists' Loans Act	...	8,21,335	7	4	
Total	...	14,26,577	3	4	

14. Irrigation wells can be made in any of the four distressed districts of Gujarát (as also in Surat), except in those parts where the water is known to be salt, which parts will best be described by each Collector for his own district. The average depth of water is also a purely local question. Statements of wells made out of takávi advances since the commencement of famine, and of areas irrigated from them and from other wells, were called for by Government in Circular No. 2999 of 3rd August 1900 and have doubtless been supplied to the Commission.

Generally the effect of the wells in securing the crop on the ground was most disappointing. In some places the water, usually sweet, turned brackish. In many places the supply fell short and everywhere the *kos* could with difficulty be kept going by half-fed bullocks. It was a common saying among the people that over and above all these causes the land was for the time less fertile because it had not been rained upon as in natural course it should have been.

Any how the irrigated rabi crops proved generally a failure except those in river or tank beds. I speak of Ahmedabad, Broach and Panch Maháls districts. In Kaira my impression is that they did better. The well-crops in the hot weather did better, but they were all of fodder and the quantity was small.

As for permanent improvement I have no statistics which distinguish between "kacha" and "pakka" wells, but seeing that the average cost of making one of the latter is at least Rs. 600, it is clear from the "average cost per well" (column 5 of the statement) that a very large number must have been only temporary. In Broach nearly all were such, for the people on the black soil of that district are not in the habit of using artificial irrigation of any kind. It is feared that in that district the money advanced was specially infructuous as it is difficult in that flakey soil to keep the sides of a pit from falling in.

As a means of employing labour well digging was most useful, specially to the middle class cultivators —the backbone of the community. There were many hard cases. I know for instance of one man in the Jambusar Táluka (Broach) who borrowed Rs. 400 takávi and spent Rs. 800 on a well which turned brackish and useless. Another man in the same táluka spent Rs. 200 with the same unlucky result. Yet even in these extreme cases the men were able to employ the members of their family and their servants for a long time and so perhaps were helped to get through much or all of the year without resort to other relief. It is to be regretted that much of the work will not remain, but on the other hand it must be remembered that indiscriminate well digging is not what the country wants. The cultivator who knows what he is about will not make a "pakka" well in his land unless he can see his way to a pretty constant supply of manure. Hence the preference

for "kacha" wells to tide over a time of famine is not altogether due to want of enterprise or inability to get enough takávi.

15 to 18. Special details will be given by the several Collectors, but as a general statement I may say that in the four really distressed districts test works were a mere name. All such tentative measures were swept away in the rush of unmistakable famine. Hordes of immigrants poured in, prices went up, men and cattle began to wander about in search of food, trees were everywhere being hacked for fuel to sell and for leaves to use as fodder. All these, combined with the bareness of the land, were symptoms that could not be misunderstood and dispensed with any real need of tests.

25. The Executive Engineer was subordinate to the Collector and the other Public Works Department Officers to the Revenue Sub-Divisional Officer in all matters except professional. In professional matters they were independent of the Civil authorities.

26. When work first began the only men available as Special Civil Officers were of a very inferior class—kárkuns and even village accountants. They were paid from Rs. 30 to 60. They were far from the standard contemplated by the Code which directs that they should be Magistrates with summary powers. They were not even thought fit to classify new comers. In December Government ordered that they should be at the disposal of the Public Works Department and should send their reports through the Public Works Department Officer or subordinate in immediate charge of the work and not direct to the Collector except in cases where the Special Civil Officer himself is the "Officer in charge". It was not explicitly laid down what he was to do in the latter case or which was to be the "Officer in charge" when both happened to be men of position. This led to a good deal of friction in one case and also to complaints by a Collector that he was precluded from making full use of Staff Corps men deputed to his district because they were placed under the orders of the Public Works Department.

Captain Southey and Lieutenant James were both posted to serve under the Public Works Department in the Panch Mahálś over the head of the Collector.

There was also discussion as to the Special Civil Officer's duties. The Commissioner, after consultation with the Superintending Engineer, ordered (with the subsequent approval of Government) in expansion of the Code (1) that he should be in charge of the kitchen, and (2) of the camps of the workers and sanitary arrangements, including latrines and the disposal of corpses. If, however, this second set of duties would be too heavy in any case the Collector was authorised to divide them according to the personality of the Special Civil Officer and the Public Works Department Officer, respectively. Always provided that no doubt was allowed to exist on any work as to the person responsible. It was also added that "if the Special Civil Officer requires labour for

any of the above duties, a body of suitable relief workers shall be placed at his disposal by the Public Works Department subordinate in charge. The Civil Officer shall keep muster-rolls of them, and they shall be paid by the Public Works Department at the same time as other relief workers are paid", and that "all constructions and repairs should be in the hands of the Public Works Department."

As time went on, the deficiencies of the men employed became more apparent, and efforts were made to get a better class. The Collector of Broach got by advertizement some graduates on pay of Rs. 60 rising to Rs. 100. Elsewhere Staff Corps Officers, Europeans from various quarters and two men who had just passed out of the Aligarh College were obtained on pay ranging from Rs. 100 upwards, and as a rule proved successful on the larger works.

It is essential at least in large works that the Special Civil Officer should be a man of judgment, temper and personal influence. The drafting off of gangs to other works requires much discrimination, whether it is done to counteract an influx of persons not in real need or only to reduce excessive numbers. He may be a check on the peculation always more or less rife and on the carelessness of native subordinates which often leads to so much hardship on individuals. His reports may be a most useful index to the Collector of the way things are going, not only with reference to the management of the particular work, but with incidental reference to the general outlook. The kárkun on Rs. 30 and the gazetted officer on Rs. 400 or 500 are so wide apart that I think that the distinction should be reconized. It is quite clear that, as recommended by the Famine Commission, the former should be under the Public Works Department Officer in immediate charge of the work. Any other arrangement would lead to bickering. But when the Collector appoints one of the latter class he should, as a rule, in consultation with the Executive Engineer, definitely declare him to be "in charge", and in such a case I see no objection to his being under the Collector alone and several advantages in his being so. To begin with, even under the present system he sends his reports direct to the Collector. Many of his duties, notably the charge of the kitchen and observations bearing on the condition of the people, are more within the Collector's sphere than that of the Public Works Department. Moreover, when the services of an officer of this class are lent to a district, the Collector should have the fullest liberty to make the best use of him—to place him on any work which needs special attention, to transfer him to village inspection, or what not. I note especially the cases of Captain Southey and Mr. James who were lent to the Public Works Department in the Panch Maháls and consequently confined to Special Civil Officer's work when active and vigorous officers like them would have been better employed for part of their time (I do not say all their time) in hunting up the villages and the inspecting staff.

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Thus while somewhat expanding the Code definition of the Special Civil Officer's duties to remove misunderstanding I would provide that where the Collector, in consultation with the Executive Engineer, declared him to be "in charge", he should be subordinate to the Sub-divisional Officer and Collector, who should forward his reports, when he thinks necessary, to the Executive Engineer for information. Further, in view of the varying calibre of the lower class of men appointed, I would have the Executive Engineer delegate to each man such only of the duties as he may be fit for. As a matter of fact some do more than others, but there is a vagueness which tends somewhat to dissipate responsibility.

32. I do not quite recognize the accuracy of the phrase "payment by results" as applied to piece-work in contradistinction to task work. Payment is made within certain limits as strictly by result in the latter case as in the former, the only difference besides the minimum being that in one case the gang is alone dealt with, while in the other the amount earned by the gang is divided among the individuals according to their classes and number of days each has worked in the gang. That, however, is a mere question of words. I understand the question to be in effect, whether it is necessary in time of acute distress or actual famine to have a minimum wage, separate relief for dependants and Sunday wage. Without any hesitation I think it is some of our engineers who had seen the Dekkhan in 1897, spoke of shoals of people coming on the work and playing at it, being sure of the minimum, and they were naturally anxious to guard against this. It also seemed to me, too, that the people worked with better spirits on piece-work. But in a country suddenly plunged into deep famine there is no help for it. Numbers come on unaccustomed to manual labour or a rough life. They can save little and when their little private resources fail they begin rapidly to fall off. On the Chandula Tank near Ahmedabad before piece-work was discarded the payments varied from 3 annas to 3 pies per head. Even when the minimum wage was introduced this meant that those who most needed feeding up got least. Under piece-work without a minimum it meant starvation.

48. Wages were stiffened or relaxed under the orders of Government only. Neither the Collector nor the Commissioner had power to issue orders independently and had to refer to higher authority. The Commissioner never acted in anticipation of sanction.

As regards tasks the Executive Engineer had powers to reduce them, subject to the approval of the Superintending Engineer in the case of important deviations. The Commissioner or Collector was not concerned with tasks.

52 to 59. Small village works formed no part of the system until the month of May when cholera dispersed the people to their homes. The step then taken is described in Bombay Govern-

ment Resolution No. 2290 of the 15th May 1900, to which a reference is requested. It is believed they consisted almost entirely of tank digging, and as the management was left to the Collector and his establishments, they will best be able to give particulars.

Speaking with last year's experience, I am inclined to think that small works might have been started with advantage at the very beginning in two sets of conditions. First in outlying territory where no central works are possible, and where in consequence the works undertaken were too far off for the people. The average man of these districts, barring special classes, can be induced to go away from home, so long as he can return once a week, say a distance of 10 or 12 miles. But he will not go farther and he cannot be made to do so. A work near his home, if in outlying posts, would be invaded by people from adjoining Native States, but they could easily be checked, for all the inhabitants of the villages round are known and all others could be sent on to the more distant central work.

My second suggestion is not in the least practical, for with the inferior village staffs and the insufficient and inefficient Inspectors that were available, the attempt would have ended in gross demoralization. But if supervision had been possible and a scheme of small works had been ready, it might have proved a means of dealing with the obstinacy and laziness of the Bhils and Kolis in the Pánch Mahals which broke the heart of the officers in that district. They might have been tempted to go upon works so near their homes, and in time they might have become accustomed to work and willing to go further off. However, Mr. Stewart, the Collector, thought that the small works begun at the end of the year were a total failure and very soon became mere dole-camps.

The experience of all the Collectors seems to show that works under Civil Agency alone will never do. There must be the co-operation of the Public Works Department officers with their more precise and regular methods. I take leave to append a scheme drawn out with this view for small works in the current year, the object of which is to combine the Public Works Department, the village Panch and the Revenue officers in the work. Whether the village Panch will be a vital force or not depends on the character of the men. In some tálukas they are hopeless, in others they are intelligent and may be incited to activity. The tendency of our subordinate officials is to exclude the villager instead of taking him into a co-partnership.

Extract from the Commissioner, Northern Division's Memorandum, dated 16th December 1900.

"12. The Collector has divided the area into groups of about ten villages each and is selecting in each group two village works to begin with for the approval of the Public Works Department. There will be little difficulty in finding such. The extension and deepeening of village tanks will

be possible even where there is water still lying in a portion and will be very useful in this arid and saltish country. Something may also be done to fill up hollows and remove prickly-pear.

13. For every group or two groups or more, or as may be, of villages a Public Works Department subordinate (Sub-overseer?) will advise and direct as to the nature of the work, will set it out, will take check measurements not less than once a week, will fix the wages to be paid at the rate fixed and will give general orders as to the execution of the work.

14. For each work a panch of villagers is to be appointed usually from the village to which the work belongs, but not necessarily so. Three members will generally be enough. They will assort the people or rather let the people assort themselves into gangs bound together by family or caste or other ties and assign to each gang a 'chokdi.' The panch will further explain to the people that they will be paid strictly according to work done. They should urge them to work. They should see that no one gets paid more or less than he ought, that cases of sickness or starvation are brought to notice and that no zoolum of any kind is done. They should report instance of abuse, hardship or mismanagement to the Mámlatdár or any authority, who may visit the work. Much importance is attached to the co-operation of the leading villagers. If they are trusted and made to feel that the work is *their* work and that they are held responsible they will be of much more help than they have been. This specially refers to a district like Broach where most of the patels are educated and nearly all intelligent.

15. For each group or work a kárkun on Rs. 15 to 20 will be appointed by the Collector, if possible from the permanent staff, to act as cashier and keep the accounts. In his intermediate time he should inspect the works and the condition of the people on them and in the villages report if there are any whom through illness or other cause the relief fails to reach and generally assist the panch. He will send his accounts to the Mámlatdár who will after scrutiny send them to the Huzúr Deputy Collector. All payments shall be made in the presence of a majority of the panch.

16. The system should be I think limited piece-work at Code rates without a minimum wage and with a lenient maximum task. So far as experience went of small works at the end of last year, it was I think shown that with a minimum they become in Gujarát free dole camps. The fear is that some persons will from weakness or laziness die rather than do some work. Many of the excessively weak however have died off. Those remaining may elect to live rather than die when a lenient task is given them near their homes. At any rate the moral effect of the minimum wage on such home works is so bad that it is worth trying to dispense with it and to watch results. I do not think it so necessary to provide a safeguard in the shape of a minimum wage against starvation on home works as on works where all the surroundings are foreign and uncongenial.

17. The task should be lenient, because the physical condition of the people is too weakened to do much, and moreover it is understood that sufficient time is to be left them to go home and attend to their household concerns, cattle and fields. The Code rates at the present price of grain (22 lbs. per rupee) work out to 7 pice for a digger, 5 pice for a carrier and 4 pice for a working child. These are but a little over the rates fixed by Government for small works last year, and as a fact they are just about half the ordinary wages of the district when grain is at normal price. No allowance is made for dependants or for members of the gang temporarily disabled from work. I am very anxious to avoid having to start kitchens, or still worse village doles which are most difficult to keep free from abuse, and by by making the daily wage a

little liberal we may do so, for, as noted above, it is astonishing how much further a pound of grain goes in a man's own house than in a strange relief camp.

18. The Collector has arranged to give immediate charge of these works and of village inspection in the affected villages of Vágra and Ámod Tálukas to Mr. Nunn and of Jambusar Táluka to Mr. Richardson. The Sub-divisional Officer in Vágra is Mr. Palmer and in Ámod and Jambusar Mr. Holland, so that the supervising staff is sufficiently strong and may be relied on to watch and bring to notice anything that needs variation of orders. I have no hope of framing from the first a cut and dried scheme which shall work throughout without hitch.

19. Mr. White, Superintending Engineer, is preparing rules to insure the separate responsibility and at the same time the co-operation of the Public Works Department and Revenue Officer which will follow; but in the meantime the Collector should arrange for prompt commencement. It is earnestly hoped that the Public Works Department and the Revenue Department may be allowed to join forces in these works. The Public Works Department contributes precision, regularity and technical knowledge which in my opinion are of great value. No relief works, large or small, are likely to be completely successful which do not unite in harmony both sets of officers.

Proposed Regulations for Village Works in Broach District.

One Sub-overseer for 2 groups representing 20 villages and 4 works.

Sub-overseer's duties. To select work, prepare sketch and estimate of each work, calculate the tasks, mark out the work (enough for at least a week), setting out separate tasks for gangs. Visit each work once a week and check, measure up the work done giving result of the measurements to the "Punch" and copy to Mámlatdár, reporting cases where he finds anything wrong or the tasks not being properly done. Should make his check measurements, in presence of the "Punch" or a certain number of its members, and point out and explain any mistakes, he finds, and their remedy.

Punch's duties. The 'Punch' (a village council) to generally superintend and be responsible for the people doing a fair day's work, also to see that 'gangs', either large or small, as may best suit be formed with certain reliable heads who will be entered in the rolls as representing the gang and who under the Punch will see that the tasks are fairly divided amongst the gang and the amount earned in like manner fairly divided. The Punch will receive from the Sub-overseer the sketch and estimate of work to be done with the tasks to be allotted and the amount to be paid for each task and will, with the Sub-overseer, see check measurements taken and take such steps as may be necessary to stop abuse or swindling under his advice.

Kárkun's duties. The Punch will have under its control one or two kárkuns, as the case may be, whose duty it will be to enter in the form which will be supplied to him the names of heads of gangs with their number, and daily muster these gangs and measure up the amount of work executed of the task set and enter such measurements in the proper column of the form supplied for the purpose and calculate the amounts earned by the different gangs for each day, making a total at the end of the week, showing the amount due to each gang with its proportion for men, women and children based on the rates supplied to him by the Sub-overseer and Punch. The Punch or a certain member of it will sign these rolls at the end of the week and on such rolls the cashier will make payment.

Cashier's duties.

The cashier will work directly under the orders of the Mámlatdár and will visit each work in his group once a week on *fixed* days and make payments on the rolls, the Punch produce, taking these rolls, with him as vouchers and at once submitting them with his accounts to the Mámlatdár. The cashier should also show the Sub-overseer the rolls he is paying or has paid, so that the Sub-overseer can point out to him anything radically wrong in them or on the other hand certify to their general correctness.

General.

Tasks set will be lenient and will enable a fair sustenance wage to be earned by completing ¾ of the full task, but on the other hand there will be no minimum payment, and when under ⅓rd the task is done no payment will be made for that day though the amount of work done may be counted into next day's measurement; in other words, where under 33 per cent. of task is done no entry will be made in the rolls for that gang on the day in question. A fixed rate of payment will be fixed for each group and this will not be subject of alteration except under the written order of the Mámlatdár who will advise the Executive Engineer, when there be any large alteration in price of grain justifying an alteration in rates of payment and on which a new scale will be supplied to the Sub-overseer and Mámlatdár for use in the group affected. The basis of the proposed scheme of relief is more or less 'Local Self-Government'; the village Punch with the assistance of Government advisers and responsible cashiers being entrusted with the task of seeing that the money given by Government for relief be expended in the best manner possible to relieve those requiring it, who on the other hand should be made to do an easy day's work in effecting local village improvements in return for the money given them.

The scheme further is intended only for application to distress and run down people who cannot go to any great distance from their homes without overtaxing their strength or neglecting such home work as they still may have. People in good condition and able to leave their villages who simply are in want of employment and are prepared to do a normal task of work for fair payment will have to go to the larger works which may be opened as necessity arises, but no one should be refused work except by order of the Mámlatdár or superior officer.

(Signed) W. H. WHITE, C.E.,
Superintending Engineer,
Northern Division.

Camp Ahmedabad,
5th January 1901.

71 to 73. Particulars of question 71 will best be given by the respective Collectors. The poor-houses were chiefly depôts for vagrants and immigrants, but residents were often admitted, in which case they became a substitute for the dole. In some places (as Hálol in Panch Maháls) the inmates were almost all residents and the poor-house was in effect a village kitchen. They were never used as a place of punishment for those who refused to work.

There was very little laxity in weeding out the able-bodied. The Medical Officer was expected to examine the inmate every morning and mark down those who were fit to go on work. As the year wore on, this became more futile. Persons would

come in weak and starving. They would be fed up and drafted to work. Often they would slip away before they arrived on the work. Anyhow they would turn up again as weak and starving as ever after a few days. In the towns a regular round was established from the poor-house to the works, from the works to the streets and from the streets to the poor-house again. One officer notes that he sent 86 to work, of whom only one joined. Half ran away and the other half refused to work when told to do so. This is only one instance of a thousand. In Broach one man was recorded as having been in the poor-house 12 times in 3 months. Mr. Rendall records in May in the Panch Mahâls that they had practically given up in despair the attempt to send people who had become well and strong to the works as they invariably returned as bad as ever.

I may note here that with two or three exceptions the poor-houses were not well managed because they absolutely depend on the humanity and sense of the manager, and Rs. 20 to 50 per month will purchase very little of either of those qualities in this country. I scarcely ever entered a poor-house without finding wasted children left to take their chance with the crowd, and exhausted wanderers brought in and left to lie untended because forsooth the morning meal time had passed. Rules there were, not always intelligent in themselves and always unintelligently applied. The Medical Officer was generally a shade more stolid than the manager. Except the poor-houses at Ahmedabad, which were under humane men, I saw none which carried out the intentions of Government, except those at Godhra and Jhálod, which were under the care of European Missionaries. Assistance of this kind should be sought, and where no suitable European is forthcoming, the greatest care should be taken in selecting a native.

Kitchen.

74 to 77. Presuming that kitchens attached to works are not meant, I may say that none were started in this Division before the month of June. At a conference of the Collectors held in that month the unanimous opinion was against them, apparently on the ground that there was no one in the villages who could be trusted to look after the cooking and distribution. There was certain to be (so it was thought) unlimited waste and abuse. The Patidárs, Rajputs and other cultivators have much pride of caste and would refuse to take cooked food on any terms. The Commissioner, however, pressed a trial of the experiment, remarking that there need be little difficulty in changing the dole machinery into kitchen machinery—*vide* paragraph 2 II (4) of his Circular No. 7192, copy of which was attached to Government Resolution No. 2680 of 30th June 1900. The radius was by Government orders to extend to every one not living inconveniently far off, and is understood to have been taken roughly at two miles.

It is now admitted that village kitchens have much to commend them. The objections felt by the Collectors will apply partly to dry dole also. Their special merit is that in them the children and other needy ones got their ration instead of having to take it home and surrender it to able-bodied and lazy relations. With this view it was made a rule that the recipients should feed on the premises. The rations and the times of feeding corresponded to the arrangements made for dole. Admission also was regulated on the same principle, wanderers being fed for a day and then passed on to a central poor-house. To meet caste objections every facility was allowed to allow Patidárs, Bráhmins, &c., to have their food cooked in separate enclosures by high caste hands.

In Kaira District, where there are many large and compact villages, the scheme was specially successful. Mr. Quin, the Collector of that district, wrote, in September 1900, that the condition of the children fed in (village) kitchens was far better than it was under dry dole. He had then been able to open 213. Mr. Heany, another observant officer in the same district, wrote: There may be peculation, but the children get a fairly substantial meal twice a day and their condition rapidly improves when transferred from dry dole. The peculation of officials is less to be dreaded than that of relations."

On the other hand, they were not successful and in most villages not even practicable, in the Panch-Mahals owing partly to the extreme inferiority of the village officers and partly to the villages not being compact in one site, but being scattered in isolated groups of huts over a large area.

On the whole, I have no doubt that the Famine Commission in their paragraph 476 are right, and in another famine I should urge the general opening of village kitchens at an early stage except in the Panch Mahals.

Famine.

Relief measures in the Northern Division.

No. 2680.

FAMINE DEPARTMENT.

Bombay Castle, 30th June 1900.

Memorandum from the Commissioner, N. D., No. 7206, dated 25th June 1900:—

"The Commissioner, N. D., presents compliments, and with reference to paragraph 1 of Government Resolution No. 2587 of 19th instant, has the honour to submit for the approval of Government copies of the following Circular orders* issued by him:—

(1) No. 7124, dated 22nd instant, regarding the issue of Mellin's Food and Swiss Milk to village children through the agency of village pátils and leading private gentlemen.

(2) No. 7125, dated 23rd instant, regarding the expansion and regulation of the village dole.

* Printed as accompaniments to this Resolution.

(3) No. 7192, dated 25th instant, containing detailed instructions regarding the relief of people until and after the rains come down heavily and for encouraging and affording facilities for cultivation."

Memorandum from the Commissioner, N. D., No. 7260, dated 26th June 1900—Submitting, in continuation of his memorandum No. 7206, dated 25th idem, copies of two more Circulars* Nos. 7190 and 7191, dated 25th idem.

RESOLUTION.—The instructions issued by the Commissioner are approved, but he should be asked to make it clearer that kitchens are not intended solely for people in the villages in which they are established. In Circular No. 7192, dated 25th June, paragraph 10, it is stated that a kitchen for a circle of three or four villages may be possible in the Panch Mahâls, and the same is likely to be the case in other tracts, although not perhaps in black-soil country owing to the difficulty of travelling in it in the rains. It is said in paragraph 2 of that Circular that it is agreed that persons from other villages should not be compelled to come to a kitchen, but in the Central Provinces it has been ordered that children within two miles of a kitchen should rarely be put on the dole lists and the same course may be followed in tracts of Gujarát other than the black-soil country and extended to people entitled to gratuitous relief who are able to walk. The correct principle is stated in paragraph 2 of Circular No. 7191 not to include in a ~~village~~ list any one living inconveniently far off.

J. MONTEATH,
Chief Secretary to Government.

To

The Commissioner, N. D.,
The Commissioner, C. D.,
The Commissioner, S. D.,
The Commissioner in Sind,
All Collectors in the Presidency proper,
The Deputy Commissioner, Thar and Párkar,
The Survey Commissioner and Director of Land Records and Agriculture,
The Sanitary Commissioner for the Government of Bombay,
The Revenue Department of the Secretariat.

Accompaniments to Government Resolution, Famine Department, No. 2680, dated 30th June 1900.

CIRCULAR.

No. 7124, dated 22nd June 1900.

Much is said both officially and unofficially about the importance of enlisting the help of private persons in the work of famine relief. District Officers generally find such help to be but a broken reed, but no effort should be spared to stimulate Patels and other influential men to take a hand. Where a "Panch charged with administrative duties is useless, it often happens that some worthy individual charged with some specific duty will give his mind to it. The Commissioner is very strongly of opinion that much may be done in this way for the care of the weakly children in a village. He knows by experience this year that District Officers may, by a little personal influence and explanation, get a trusty Patel to take charge of a few bottles of Mellin and prepare it and feed with it the underfed children daily. The Commissioner has already sent some consignments of Mellin and Milk to various officers for distributing in this way and he is ready to send many more. He would specially ask the Collectors to communicate these remarks to any of their subordinates who will

* Printed as accompaniments to this Resolution.

take the matter up keenly and to let the undersigned know their names. The last consignments were sent to the following officers in the Ahmedabad, Kaira, Panch Mahâls and Broach Districts.

* * * *

CIRCULAR.

No. 7125, dated 23rd June 1900.

His Excelleney the Viceroy has wired his wish that the present emergency should be "boldly and generously handled."

2. In the spirit of this message the following instructions are issued.

3. It is presumed that since the dispersion of the people by cholera all persons found in danger of starvation, whether able-bodied or not, have been put on the dole list.

4. All who are too weak to work and all others who have some good excuse for remaining in the village, such as to take care of cattle or to begin cultivating the land, should be kept on the dole list. Destitute cultivators will in due time receive a separate allowance for subsistence, but meanwhile may be kept on dole if they are doing any *bonâ fide* work.

5. If a person is strong and able-bodied and remains idling in the village without doing any work, the first inspecting officer who comes (from Circle Inspector upwards) should warn him that he cannot be kept on the dole list for ever. He should make the note "warned" on his name in the dole list. If he is still not gone to work at the next visit of an inspecting officer, he should be taken off the list and pressed to go to work. At subsequent visits all persons so taken off should be specially enquired after and replaced for a few days more on the list if in danger of starvation. In short every dole list should be scrutinized by all inspecting officers with reference to (1) those who ought to be on it and who are not, (2) those who are on it but ought not to be, and (3) those who were on it and have been removed.

6. Inspecting officers should be on their special guard against men who, being deprived of dole, continue in the village and eke out a living from the allowance made to their dependants.

7. The above also applies to kitchen lists in places where here are village kitchens.

CIRCULAR.

No. 7192, dated 25th June 1900.

In the Central Provinces cooked food is given in kitchens in every village to all comers whether able-bodied or not, and this is to be continued during the rains. The scheme has been accepted by the Government of India on the assumption that in the circumstances of the Central Provinces it is the one sure way of preventing much mortality.

2. The Commissioner thinks all the Collectors will agree with him that kitchens on such a very extensive scale are out of the question in Gujarât; but the above fact shows the spirit with which the Government of India expects the crisis to be met. Eliminating people with means of their own, the majority of the population will have to be fed—

Until the rains come down heavily—

(1) By employment on the regular works and on "small" works, more of which should even now be opened wherever possible and likely to be useful.

(2) By dole for all those remaining in the villages—*vide* this office Circular No: 7125 of 23rd instant.

(3) By poor-houses. Can any more poor-houses be started with advantage? They may be used as kitchens afterwards. The rule for admission into these places must not be too strict. Persons *beginning* to run down may be admitted and treated as directed in the Circular above noted for dole. There is too much of a feeling among subordinates that an overful poor-house means bad management.

II. When the rain comes down heavily—

(1) By monthly allowance from the Charitable Fund for three months. On reconsideration the Commissioner thinks this should be made a little more attractive than the dole, say Rs. 5 per month for two adults. It will be dependent on the recipients cultivating *bonâ fide* land either of their own as holder or tenant or on the share system. If the táluka has been divided into Circles it will not be difficult for the officer in charge to ascertain from the headman of each village by the end of the first month if the condition has been fulfilled. It is presumed that the rupees (*vide* margin) already allotted from the Charitable Fund to (*vide* margin) is being all or nearly all applied to the provision of subsistence and also of seed. The Collector will kindly furnish information as to this.

	Rs.
Ahmedabad	2,65,000
Kaira	2,28,000
Panch Mahâls	1,24,000
Broach	1,29,500
Surat	20,000
Thána	5,250

(2) By takávi for subsistence. May be lent on the same condition to such cultivators (presumably of a better class) as have not received free gift from the Fund. It is hoped also that larger land-holders may be inducee to extend their cultivation by the loan of takávi to be spent as wages.

(3) By employment on such works as can be kept open.

(4) All the rest will have to be kept (1) on dole or fed (2) village kitchens. The Commissioner will be obliged if the Collector will consider at an early date in what villages kitchens can be started. There are difficulties in the way, but the Government of India evidently approves of kitchens and there need be little delay in changing the dole machinery into kitchen machinery. One of their advantages is that they make it possible to put pressure on the loafer. A good Superintendent or a sensible "Panch" will see that each woman and child eats its own ration and does not carry it away to be gobbled up by a sturdy man of the family lying at home. Efforts should be made to start a kitchen wherever possible and the Commissioner requests the favour of a brief report of what has been and can be done. It is not clear why there should not be one at every village of size, but it is agreed that persons from *other* villages should not be compelled to come to it. Where there is no kitchen there should be dole in full force and where there is no dole there should be a kitchen. Care must be taken to prevent them from becoming call-houses for vagrants. If started in only a few centres people will flock to them from far and near. To prevent this no one should be per month (?) entered in the lists, but residents within a specified area. The lists should be scrutinized in the same way as dole lists.

3. It should be impressed on all responsible for village inspection that every one except those who have means of their own must be included in one or other of the above classes.

4. Special note should be taken of the dependants of persons who are in receipt of a free grant of cash from the Fund or of takávi for subsistence. It is not intended that these grants should be enough to keep the non-working members of a family as well. They are to get dole at the sanctioned rates or rations from the kitchen.

5. Too often it will happen that the rayat having got money (either free gift or takávi) for seed and for subsistence will say "How am I to cultivate without bullocks?" It will be impossible to supply all with bullocks not so much for want of money as for want of bullocks. But it is hoped the Collector will suggest and adopt any expedient for increasing the number that occurs to him. If Mr. Mollison's hand-implements are rejected, it will still be possible to work with the ordinary kodáli and pávra. This should be urged on the people. They should be told that help has been given them on condition that they do *something*. If all officers keep pressing them it is likely they will comply and that the question of resuming or stopping the grants will not practically arise. It is undesirable that it should.

6. Cultivators should be clearly informed that any crops which they may grow by hand-implements or by kodáli will not be attached for assessment. They will be allowed to remove it on condition that it is for their own eating, not to sell.

7. It is a question how and where payments of free gifts and takávi for subsistence and seed should be made. The Commissioner has already expressed his personal opinion that they should be made in each Circle by the best man the Collector can command in the presence of the village Pátils and Taláti, and that they should be made in two instalments at least. In black-soil tracts it may be necessary to give the whole in one sum. There will be great danger, in handling so many small sums of money, of peculation. Any easy check that can be devised against this will be desirable. It it suggested that each recipient should be given at the time of payment a chit clearly stating under each head the amount he has received. A percentage of these chits should be afterwards tested by questioning the recipient and comparing them with the books.

8. The class of persons who will not through pride go to work nor receive dole requires special looking to. The better sort will get takávi, but of the poorest a separate list should be kept (if there are any in a village) and cash dole should be offered to them on nominal *loan*. This may soothe their pride.

9. In some villages there are small things to be done such as levelling ground, removing prickly pear, mending roads, &c. The Circle Inspectors should report these and get them done through the patel in the rains, if employment is needed.

10. In the Panch Maháls are many villages where there are no Banias' shops. The best plan is believed to be to pay dole in cash and leave people to get their own grain. For the country is no more inaccessible than it is on the coast and the roads are clear even in the rains. The Collector is requested to be good enough to once more carefully reconsider this matter and say if anything more can be done to ensure provision of food to all the villagers A kitchen for a circle of three or four villages may be possible in places and, if so, should certainly be tried.

CIRCULAR.

No. 7190, dated 25th June 1900.

It has been stated to the Commissioner by a high placed officer that there is some confusion still existing in the minds of some district officers as to the respective limits of

village dole, Charitable Funds and takávi for subsistence. It is difficult to understand how this can be, but, as it is most desirable that there should be uniformity in the main lines of action in the Division, the Collectors are requested to be good enough to see that the principles followed are as stated below.

2. All but a fraction of the grants from the Central Relief Fund should be spent in grants for seed and maintenance to the poorest class of cultivators. These should be selected by the takávi officer mainly by the test already laid down (*viz.*, having resorted to relief works) and should be awarded seed and one month's allowance to begin with on the condition that they cultivate as much land as they can by whatever means they can.

3. Probably the grants up to date will not be enough to cover all on this list, but more money comes in from time to time and is distributed at once among the Collectors.

4. It must be distinctly understood by officers and people that the Central Fund grants are not sufficient and are not intended to provide for dependants. They are for the maintenance of the adult working members of the family. *Dependants are to be put on the village dole or kitchen list.*

5. Next must be taken up those poor cultivators who may receive takávi for seed, subsistence and bullocks. This too is to be given on condition of the recipient cultivating as much land as he can by what means he can. This too does not provide for dependants who are to be put on the dole or kitchen list. In order to spread the help as wide as possible advances should not be made for the purchase of more than one bullock per cultivator.

6. Lastly will come takávi to the better class of cultivators.

7. A practical difficulty may arise through the want of finality in the Central Relief Fund grants. Two lákhs came in to-day and it may be hoped more will come. Each awarding officer will perhaps keep a margin in his list of poorest cultivators which can be filled up from subsequent grants. If, when the Charitable Fund failed, he gave takávi to all the rest, it may still be possible to change the takávi into free gift for the most deserving. Great care will have, however, to be taken in such cases to prevent confusion of accounts and fraud. The Commissioner can only promise to send on any further grants at once when received.

CIRCULAR.

No. 7191, dated 25th June 1900.

The objections to village kitchens are mainly against making people from other villages go to them or else are such as apply equally to village dole on a liberal scale.

2. It is not proposed to include in a kitchen list any one living inconveniently far off.

3. The immediate management should be in the hands of the most reliable local persons, generally by preference a Panch of not too many members, including the Patel and one or two leading men. The Mámlatdár and other officers can do a good deal to interest such men in the work by explaining to them all that Government is doing and how it is their duty to help. "If Government gives the food, won't you look after your own villagers?" is an appeal which will meet with a response, if urged in the right way.

4. The Taláti should keep the accounts and in short the machinery should be that already in work for the daily dole.

5. When cooking pots cannot be otherwise obtained, the Panch should be persuaded to lend or get others in village to

lend them, at any rate to begin with. A couple of large pots are all that are required. Here again a little tact and vigour on the part of táluka officers will do wonders.

6. The same rules to apply to the kitchen list as to the dole list. Wanderers from other villages to be fed for the day and sent back to their own villages. If their numbers increase or if foreigners come, special report to be made.

7. Steps should be taken to let the people know how much ration they are entitled to. If they once know, they will protect themselves. The Circle Inspector or other officer should take an early opportunity of getting the ration weighed and cooked in his own presence so that the people may know by eye how much to expect.

77. Until the end of April 1900 the grant of gratuitous relief by village dole was strictly limited to the classes of persons described in Section 57 of the Famine Relief Code. But when severe cholera broke out on the Relief Works and began to scare away the workers, Government sanctioned, at the instance of the Commissioner, the grant of village dole to such of the persons scared away by cholera as were in danger of starvation. In June 1900, in view of the continued mortality and the advent of the cultivating season, a still further expansion was made. Copies of the circular orders issued are attached.

The payment of dole to these persons continued until they were otherwise provided for either by field labour during the kharif season or after the kharif harvest. Many of them are doubtless still in receipt of dole, though the numbers have been largely reduced during the past few months.

CIRCULAR.

No. 7125, dated Camp Broach, 23rd June 1900.

His Excellency the Viceroy has wired his wish that the present emergency should be "boldly and generously handeld."

2. In the spirit of this message the following instructions are issued.

3. It is presumed that since the dispersion of the people by cholera all persons found in danger of starvation whether able-bodiedor not have been put on the dole list.

4. All who are too week to work and all others who have some good excuse for remaining in the village, such as to take care of cattle or to begin cultivating the land, should be kept on the dole list. Destitute cultivators will in due time receive a separate allowance for subsistence, but meanwhile may be kept on dole if they are doing any *bonâ-fide* work.

5. If a person is strong and able-bodied and remains idling in the village without doing any work, the first Inspecting Officer who comes (from Circle Inspector upwards) should warn him that he cannot be kept on the dole list for ever. He should make the note "Warned" on his name in the dole list. If he is still not gone to work at the next visit of an Inspecting Officer, he should be taken off the list and pressed to go to work. At subsequent visits, all persons so taken off should be specially enquired after and replaced for a few days more on the list if in danger of starvation. In short every dole list should be scrutinized by all Inspecting Officers with reference to (1)

those who ought to be on it and who are not, (2) those who are on it but ought not to be, and (3) those who were on it and have been removed.

6. Inspecting Officers should be on their special guard against men who being deprived of dole, continue in the village and eke out a living from the allowance made to their dependants.

7. The above also applies to kitchen lists in places where there are village kitchens.

F. S. P. LELY.
Commissioner, N. D.,

CIRCULAR.

No. 7191, Camp Broach, 25th June 1900.

The objections to village kitchens are mainly against making people from other villages go to them or else are such as apply equally to village dole on a liberal scale.

2. It is not proposed to include in a kitchen list any one living inconveniently far off.

3. The immediate management should be in the hands of the most reliable local persons generally by preference a Panch of not too many members, including the Patel and one or two leading men. The Mámlatdár and other officers can do a good deal to interest such men in the work by explaining to them all that Government is doing and how it is their duty to help. "If Government gives the food, won't you look after your own villagers?" is an appeal which will meet with a response, if urged in the right way.

4. The Taláti should keep ths accounts and in short the machinery should be that already in work for the daily dole.

5. When cooking pots cannot be otherwise obtained, the Panch should be persuaded to lend or get others in the village to lend them, at any rate to begin with. A couple of large pots are all that are required. Here again a little tact and vigour on the part of Táluka officers will do wonders.

6. The same rules to apply to the kitchen list as to the dole list. Wanderers from other villages to be fed for the day and sent back to their own villages. If their numbers increase or if foreigners come, special report to be made.

7. Steps should be taken to let the people know how much ration they are entitled to. If they once know, they will protect themselves. The Circle Inspector or other officer should take an early opportunity of getting the ration weighed and cooked in his own presence so that the people may know by eye how much to expect.

F. S. P. LELY,
Commissioner, N. D.

To

The Collector of Ahmedabad with 100	copies for distribution.
The Collector of Kaira with 100	do.
The Collector of Panch Maháls with 75	do.
The Collector of Broach with 75	do.
The Collector of Surat with 50	do.

No. 7192 of 1900.

Camp Broach, 25th June 1900.

In the Central Provinces cooked food is given in Lit-kitchens in every village to all comers whether able-bodied or not' and this is to be continued during the rains. The scheme ha

been accepted by the Government of India on the assumption that in the circumstances of the Central Provinces it is the one sure way of preventing much mortality.

2. The Commissioner thinks all the Collectors will agree with him that kitchens on such a very extensive scale are out of the question in Gujarát, but the above fact shows the spirit with which the Government of India expects the crisis to be met. Eliminating people with means of their own the majority of the population will have to be fed

I. Until the rains come down heavily—

(1) By employment on the regular works and on "small" works, more of which should even now be opened wherever possible and likely to be useful.

(2) By dole for all those remaining in the villages—*vide* for this this office Circular No. 7125 of 23rd instant.

(3) By poor-houses. Can any more poor-houses be started with advantage? They may be used as kitchens afterwards. The rule for admission into these places must not be too strict. Persons *beginning* to run down may be admitted and treated as directed in the Circular above noted for dole. There is too much of a feeling among subordinates that an over-full poor-house means bad management.

III. When the rains come down heavily.

(1) By monthly allowance from the Charitable Fund for three months. On reconsideration the Commissioner thinks this should be made a little more attractive than the dole, say Rs. 5 per month for two adults. It will be dependent on the recipients cultivating *bona-fide* land either of their own as holder or tenant or on the share system. If the táluka has been divided into Circles it will not be difficult for the officer in charge to ascertain from the headman of each village by the end of the first month if the condition has been fulfilled. It is presumed that the Rs. 2,23,000 already allotted from the Charitable Fund to Kaira is being all or nearly all applied to the provision of subsistence and also of seed. The Collector will kindly furnish information as to this.

(2) By takávi for subistence. May be lent on the same condition to such cultivators (presumably of a better class) as have not received free gift from the fund. It is hoped also that larger land-holders may be induced to extend their cultivation by the loan of takávi to be spent as wages.

(3) By employment on such works as can be kept open.

(4) All the rest will have to be kept (1) on dole or fed; (2) in village kitchens. The Commissioner will be obliged if the Collector will consider at an early date in what villages kitchens can be started. There are difficulties in the way, but the Government of India evidently approves of kitchens and there need be little delay in changing the dole machinery into kitchen machinery. One of their advantages is that they make it possible to put pressure on the loafer. A good Superintendent or a sensible "Panch" will see that each woman and child eats its own ration and does not carry it away to be gobbled up by a sturdy man of the family lying at home. Efforts should be made to start a kitchen wherever possible and the Commissioner requests the favour of a brief report of what has been and can be done. It is not clear why there should not be one at every village of size but it is agreed that persons from *other* villages should not be compelled to come to it. Where there is no kitchen there should be dole in full force and where there is no dole there should be a kitchen. Care must be taken to

prevent them from becoming call-houses for vagrants. If started in only a few centres people will flock to them from far and near. To prevent this no one should be entered permanently in the lists, but residents within a specified area. The lists should be scrutinized in the same way as dole lists.

3. It should be impressed on all responsible for village inspection that every one except those who have means of their own must be included in one or other of the above classes.

4. Special note should be taken of the dependants of persons who are in receipt of a free grant of cash from the fund or of takávi for subsistence. It is not intended that these grants should be enough to keep the non-working members of a family as well. They are to get dole at the sanctioned rates or rations from the kitchen.

5. Too often it will happen that the rayat having got money (either free gift or takávi) for seed and for subsistence will say "How am I to cultivate without bullocks." It will be impossible to supply all with bullocks not so much for want of money as for want of bullocks. But it is hoped the Collector will suggest and adopt any expedient for increasing the number that occurs to him. If Mr. Mollison's hand implements are rejected it will still be possible to work with the ordinary kodáli and pávra. This should be urged on the people. They should be told that help has been given them on condition that they do *something*. If all officers keep pressing them it is likely they will comply and that the question of resuming or stopping the grants will not practically arise. It is undesirable that it should.

6. Cultivators should be clearly informed that any crops which they may grow by hand implements or by kodáli will not be attached for assessment. They will be allowed to remove it on condition that it is for their own eating not to sell.

7. It is a question how and where payments of free gifts and takávi for subsistence and seed should be made. The Commissioner has already expressed his personal opinion that they should be made in each Circle by the best man the Collector can command in the presence of the village Patels and Taláti; and that they should be made in two instalments at least. In black soil tracts it may be necessary to give the whole in one sum. There will be great danger in handling so many small sums of money of peculation. Any easy check that can be devised against this will be desirable. It is suggested that each recipient should be given at the time of payment a chit clearly stating under each head the amount he has received. A percentage of these chits should be afterwards tested by questioning the recipient and comparing them with the books.

8. The class of persons who will not through pride go to work nor receive dole requires special looking to. The better sort will get takávi, but of the poorest a separate list should be kept (if there are any in a village) and cash dole should be offered to them on nominal *loan*. This may soothe their pride.

9. In some villages there are small things to be done such as levelling ground, removing prickly pear, mending roads, etc. The Circle Inspectors should report these and get them done through the Patel in the rains, if employment is needed.

10. In the Panch Mahál are many villages where there are no Banias' shops. The best plan is believed to be to pay dole in cash and leave people to get their own grain. For the country is no more inaccessible than it is on the coast and the roads are clear even in the rains. The Collector is requested to be good enough to once more carefully reconsider his matter and say if anything more can be done to insure

provision of food to all the villagers. A kitchen for a Circle of three or four villages may be possible in places and, if so, should certainly be tried.

F. S. P. LELY,
Commissioner, Northern Division.

To

The Collector of———

No. 7333 of 1900.

From

The Honourable Mr. F. S. P. LELY, I.C.S,
Commissiner, Northern Division.

To

The COLLECTOR of———.

Camp Broach, 27th June 1900.

Sir,

With reference to my Circular No. 7125 of 23rd instant and other recent Circulars, I have the honour to remark that of the large number of destitute people whom we shall have to support in some way when the rains fall, it is far better that most should be employed on the land rather than on comparatively useless and troublesome relief works. That in short is the object of recent orders—to make sure against wandering and starvation when the rain comes, and to get the people back on the land.

2. It has been suggested that a large cultivator may employ labourers to till his land and get them paid at the expense of Government by putting them on the dole. That will not, however, be possible, if the Inspecting Officers understand the orders. A man who works for another certainly has "means of subsistence" in the shape of a claim on his employer to whom he should be referred.

3. It has also been suggested that the list of persons who will not receive help from feelings of pride and who are allowed to take it on nominal loan, should be strictly limited. I quite agree as to this. Even Patidárs who give themselves such airs should not, I think, be humoured. The people contemplated were Grássiá-Bháyats, Mussalmans of good family, and the like.

4. As to the general situation I need not remind you that it is quite novel in Gujarát and no one can say beforehand how it will develop. It is probable, indeed it is to be hoped, that the first heavy fall of rain will cause a general dispersal from the works of persons who have no means of living. In the villages there is already a large population of men, women and children already worn down by a year of famine and ill-fitted to stand the strain of change of season and of hard field work. I feel confident that the first step, as indicated in my circulars, is in accord both with the policy of Government and with ordinary prudence, *viz.*, to make sure against a further deterioration in the condition of the people further mortality. At the same time I am very strongly of opinion that an uncertain situation like the present is not to be governed by hard and fast rule. We must keep our hands upon the facts as they develope and feel our way, changing the course of the ship as the weather may indicate. To make this possible the Collectors must have well organized inspection throughout their villages—*vide* this office No. 7261 of 26th instant. This is the foundation stone of success.

5. I cannot but hope that in most parts the people will respond themselves to the call to cultivate. If it be insistently pressed on them that Government will only give continued help to the able-bodied who do some work to increase the coming crop, they will admit the reasonablenes

of it. The Patels and other village leaders will also bring influence to bear in the same direction, if the Inspecting Officer will only take the trouble to enlist their aid. But if this is found to be over-sanguine if the instructions of Circular No. 7125 result in excessive abuse (*some* abuse there must be) and an unmanageable number of idle paupers, the formality of "warning" may be dispensed with and the idle at once removed, though a careful eye should be kept upon them as desired in the circular.

6. In conclusion I need scarcely ask you to favour me at short intervals with information as to how things are going and suggestions.

I have &c.,

F. S. P. LELY,
Commissioner, N. D.

90. There is no previous famine in this Division to refer to, but some other comparisons may be possible.

At the beginning of the year there were many who from social pride scorned to eat the bread of charity. Many of these persisted even (some of them) to death. Others, as the year wore on, gave in. Tálukdárs came to work early, provided it was near home. They were ganged separately. I have ample evidence in reports of April, May and June that many respectable Patidár families had to bow to necessity.

Large masses of people at the other end of the social scale refused to come on relief works or even the poor-house through laziness, superstition, fear, or an animal instinct leading them to cling to their homes, and it cannot be said they showed increased readiness at any time. They were willing enough to come on dole. I do not propose to dilate much on this difficulty. It occurred more or less in every district, but especially among the Dharálas of Kaira and the Bhils and Kolis of the Panch Maháls. Mr. Ryan writes so late as June 1900: "The people will persist in wearing their lives out by collecting leaves rather than go to the poor-house. Heaps and heaps of people have I met outside villages tottering along, but nothing will induce them to go to the poor-house. Mr. Stewart, the Collector, was defiantly told by 100 able-bodied men in Samli, in the month of June, that they would not work but wanted dole, and that "when they were thin the Sarkár would feed them" and that "that was enough" for them. "The Dharála," says another observer in Kaira, "wants to be fed in his own village. If he goes on work he soon returns and unless put on dole falls off and becomes emaciated." At Parvat, in May, the people (Dharálas) were starving, but no one would go to the poor-house only two miles off at Umreth. "183 Dharálas in another village had been sent to Dákor work, but all returned long ago, and on being asked to go to work they flatly refused." Not to weary the Commission with a story that must be familiar to them I will only give one from Mr. Gibb's own experience which I could match with many from my own. "About 6 miles from Modása to-day I saw tow females

lying near the road. I went up to see and found a mother and daughter, both emaciated. I induced them to get up and told them to go for food to a village 300 yards off. The mother could not walk so far, so I left them telling them to wait and I would get them sent to Modása (at which they protested). I went to the village and got five men to come with a cot. On my return the woman and child were nowhere to be seen. After some search we found the child hiding under a bush. We asked her where her mother was and she pointed. We looked there and afterwards found the mother in close hiding under a bush in the opposite direction to that in which the child had pointed. The mother had to be forcibly tied on to the cot."

The evidence is that, so far from evincing more readiness to work as the year advanced, these people became more and more demoralized as the dole developed. They tried to live on the dole given to their children. Mr. Rendall notes on 13th May that they were growing more obstinate in refusing any other form of relief. Friends of the Bhils remarked with regret that these once simple and honest folk who would formerly have scorned a lie and regarded as sacred a gift from an English official will now slyly sell it and beg for another. I have no figures by me, but am informed by the Public Works Department officers that even those who came on work did so to draw the minimum pay without attempting to do the task.

94. Births and deaths are registered on report by the Police Patel, and in Municipal towns by the Municipal authorities in the standard form. Practically in villages it rests with the Police Patel himself and the Hávildár to find out cases as they occur and make a note of them. In the Municipalities there is generally a by-law making it compulsory on the head of the family or occupier, caretaker or manager of the premises within the limits of which the birth or death occurs, to report for registration. In Municipalities where there is a convenient chowkey or town gate on the way to the burial or burning ground it is the practice to get passing corpses noted by a policeman or clerk on duty. The registers are checked by the various inspecting officers, Sanitary and Revenue.

In March the Collector of Kaira reported that the practice of registration on relief works varied, the duty on some being left to the village or Municipal authorities and on some being performed by the Medical Officer or the Special Civil Officer. The Commissioner directed that in future the Special Civil Officer should keep the register in the standard form, as the relief work had usually very little connection with the adjacent town or village, and deaths being sometimes very frequent it would be inconvenient to bring in the Patel or Municipal Secretary on all occasions. The order was, however, imperfectly carried out.

95. My answer to this question is that the generally high mortality was closely connected with

unsuitable and insufficient food. The Commission has no doubt heard sufficiently often that the soil of Gujarát requires comparatively little labour, which results in a soft and lazy breed of men, accustomed to good food and unused to hardship. The poorest got 3 meals a day of bread of home-grown grain, kicheri and chas (whey) as much as he could eat. The hardy Deccani of the same class never smells kicheri, except on holidays, and gets no oil or chas. Even the Bhil and Koli of the Panch Mahals does not in modern days live on jungly fare. He gets good grain and dáll, ghee and chas throughout the year, not to speak of mowra, tobacco and various condiments. The famine came upon these people as a terrible shock. It dazed them. Even the better classes had no grain in reserve. It is on record that at the beginning of the century Government on more than one occasion had to remit revenue because the stocks were so large as to be unsaleable. Within living memory the Tálukdárs of Dhandhuka had in store 10 or 12 or more pits of grain representing the harvests of so many years. All this is changed and in 1899 no one had more in hand than would carry him on till November. In these straits many went on the works, many held off. As to the latter there can be no doubt about their food. They stuck to their homes or wandered aimlessly about through sheer laziness or fear, or with the desperate hope of saving their cattle by painfully picking the leaves from trees as fodder. They lived on the scanty proceeds of head-loads of fire-wood, on roots and other jungle products. In the Panch Mahals they held on even after the mowra and toddy had failed, eating rubbish, which ruined their digestion.

Those who went sooner or later on the works fared better, but still badly. It is well known that the native of India is upset by strange food even when it is plentiful and wholesome. It was now chiefly Burmah rice less sustaining than his home-grown jowár or bájri, less in quantity, and with no oil, no chas, no dáll. He was too listless to wash away the lime with which it was mixed, or to cook it properly. It was no unusal sight to see the worker eating it raw. It was complained that in Broach "láng" and in Ahmedabad "wál" was mixed with the flour, both of them irritants to stomachs that were not used to them. Whatever the cause, diarrhœa was prevalent on all the works from the very commencement, and many in time succumbed. One intelligent Mámlatdár wrote that they seemed to die of "nervous strain" under the novel experience of incessant work in strange surroundings. Mr. Quin in Kaira speaks of "the constitutional inability of the Dharála to bear the strain of prolonged work." That may be so, but the mortality was also the result of foreign food, inferior food, adulterated food, reduced food upon people whose greatest privation before that had been a short crop of mangoes or mowra.

It is a pertinent fact that apart from the deaths on the works a large number occurred amongst those

who had returned ill from them to their villages. Mr. Painter, an indefatigable officer, writes in January: "I have been looking into the matter (of mortality) closely and find a large proportion of deaths are traceable to the relief works. The mortality on the works is high, and it is a fact that many deaths in villages are those of persons who had been on relief works and falling ill there returned home and died. The symptoms are generally looseness of the bowels and fever. The prevalence of dysentery and diarrhœa on the works is very noticeable." To take another part of the Division, the Mámlatdár of Dholka, an intelligent man, writes in May: "Death rate not due to starvation, but to the return of labourers from works in a bad condition." This is the purport of many other diaries of Inspecting Officers.

Some of the more intelligent Inspecting Officers made a point of enquiring on this point when they visited villages and I subjoin a summary of notes made from their diaries.

No. of Villages.	No. of Deaths up to date of visit.	Of whom had returned from relief works sick with diarrhœa and fever.
93	3,825	1,900

I may also be allowed to add, though not strictly within the question, that apparently climatic influences have been at work this year apart from famine. The mortality in Bombay City has been high. I have already mentioned in a report to Government that out of 800 well-nourished children in the Mahipatrám Orphanage at Ahmedabad, 150 died within the first 20 days of May of influenza. Fever and other diseases have attacked almost every European lately and the well-fed classes, such as servants of Europeans, Mission Agents and the shop-keeping class, have been as much affected as less fortunate people.

100 & 101. Immigrants were of two classes—(1) Gangs generally of some size who wandered aimlessly about from place to place, living on what they could get by begging and with no intention of working. Many of these filled our poor-houses. (2) Persons who came to our relief camps works presumably because there were none, or none so convenient, in their own territory.

The influx of both classes began early in the famine. In September the City of Ahmedabad was flooded with refugees from Jodhpur, Baroda, Pálanpur and Káthiáwár. On the 15th September, an average day, 1,214 arrivals were registered at a single chowkey. Some went to work, some infested the streets and died in the fields outside. In Viramgám, another wealthy centre, "are crowds of lusty beggars attracted by private charity", writes Mr. Mead in February, and though evidence is wanting, there is no doubt that many came from the neighbouring States of Káthiawár and Pálanpur Agency. The

Northern Táluka of the same district being interlaced with villages of the Mahi Kántha was overrun with wandering immigrants. "They are simply swarming in Modása", writes Mr. Reuther in July, who in seven mornings personally collected and took to the poor-house an average of 155 per day. Of 157 in the Modása Hospital 9/10ths were wanderers and he was "morally certain that they all belong to the I'dár State." In the first week in September 194 out of 300 in the Kapadvanj Poor-house (Kaira District) were Native State subjects. Similarly at Mátar. In the Panch Maháls Mr. Ryan wrote that every morning 2 or 300 new comers from Lunávada State appeared for dole in the small town of Shera. At last it was found necessary to order all who came back to their own territory, for about 2,000 were in and about the town seeking relief. The Collector of Broach reported in September that large numbers were flocking through his district from Káthiáwár, as also from Ahmedabad. They showed no inclination to stop or to work and were in a pitiable condition. The Collector of Surat in the same month reported that over 1,000 refugees from Káthiáwár and Márwár sleep outside the city at night and come inside to beg by day. Parties were also landing on the Bassein Coast in the Thána District, having come by sea from Káthiáwár. In June 1900 there were 305 Baroda subjects in the Ahmedabad Poor-house, 102 from Rewa Kántha in Broach Poor-house, and large numbers were reported from others. On the works immigrants were still more in evidence. On the Chandula Tank, one of the first works started near the City of Ahmedabad, 5,000 out of a total of 8,000 were from Jodhpur. In Kaira District at the same period a census on the Bobhi Tank disclosed 2,500 Baroda subjects and on the Anklao Tank 2,300 out of a total of 10,251 workers. Later in the year there were said to be two works in the Baroda Táluka of Petlád employing 778 persons and a third on which the number is not stated. In the adjoining British Táluka of Borsad the numbers were at that time 55,000. In October the A'mod-Pálej Road was taken in hand in Broach District, not because it was a desirable work, but because the need was emergent and there was nothing else ready. It was quickly swamped by people from across the Baroda border, who numbered 4,000 (from 37 villages) out of a total of 9,000, when no more could be taken on and further arrivals of our own people had to be sent elsewhere. 500 sickly people from Rájpipla State swelled the mortality on the Sukaltirth Work in July. Colonel Ferris, Political Agent of the Mahi Kántha, wrote in December: "At Ahmednagar (in I'dár State) I was told there were no starving poor. I found the town swarming with emaciated men, women and children. At Háthmati Canal Works (British) I found 879 I'dár subjects." Such are a few of the facts that came to my personal notice. Tabular monthly statements of immigrants have been submitted since December to the Government of Bombay, who have doubtless supplied them to the Commission. They are, however, far from complete,

because as soon as the people suspect the object of enquiries they give false addresses.

The course followed with reference to these people was that indicated in paragraph 596 of the Famine Commission Report, 1898. The various Residents and Political Agents were communicated with and also report was made to the Local Government, who in their turn brought the facts to the notice of the Government of India. The Jodhpur immigrants who came in at the beginning of the year were cleared off, and I do not think this Division has any reason to complain of Rajputána, Káthiáwár or the Pálanpur Agency. Baroda, the I'dár State and some of the Rawa Kántha States have throughout the year imposed an undue share of their burden upon us. It is not apparent that there is any remedy except political pressure on the State concerned. It must be remembered that our own subjects too wander. People from Ahmedabad were picked up in Thána District; people from Khándesh, &c., in Central India.

Allied to this subject is the question of famine relief in Inámi villages. In Hálol (Panch Maháls District) more than half the Mahál is Inámi. In Kálol 31 out of 65 villages are Inámi. The owners were reported as a rule to do nothing. Our Inspectors visited them and gave dole at Government expense, but the Tálukdárs would neither look after the people nor keep efficient village officers. On the other hand some of the Rajput Grássias on the borders of Káthiawár have shown a sense of their position by sacrificing their ornaments and other personal property to keep together and feed their cultivators and labourers and village servants. An instinct inherited from generations of proprietorship has impelled them to preserve their villages from desertion and to maintain their dependants in the time of trouble.

103. The only suggestion I have to offer is that, Object II, *viz.*, the provision for orphans, should be made secondary, *i.e.*, should receive no grant from the fund unless it appears that local institutions are not equal to the task. The truth is that, there has not been and is not any need in this Division to divert for the use of orphans a single pie of the Mansion House Fund, all of which is sorely wanted for Object IV. This important branch of relief has been and will be entirely undertaken by private effort, including the various Missions and purely native establishments such as the Mahipatrám Anathasram in Ahmedabad, the Mahájan Home in Surat, and Mr. Chabildás Lalubhai's Orphanage. So long as these local voluntary agencies exist all we need ask for is a guarantee that they are respectable and that they have the funds to maintain the children till the age of discretion and give them a suitable education. Other things being equal, preference might be given to institutions managed by native gentlemen, but so long as any door remains open the committee should not gratuitously take such a charge upon itself when thousands of cultivators are sinking into day labourers for want of money to replace their lost cattle.

The Bombay Committee recently made a grant of Rs. 6,000 to the Surat Home for Orphans. It was done without consultation with me and was, in my opinion, ill advised. To begin with, it was altogether disproportionate to the needs of Surat, which were comparatively trivial. To be equally generous to the other districts they should distribute among them at least a lákh of rupees, which of course they have not the money to do. It is, moreover, unnecessarily taking a responsibility which would be locally accepted. There are on the committee at Surat 58 names of well-to-do and influential gentlemen who are well able to make up Rs. 6,000 between them without feeling it. If they decline to do so that is no reason for providing the money at the cost of the broken cultivators so long as the supporters of the local Mission are willing to give the necessary guarantees. The religious cry should, I think, be ignored altogether in a matter of life and death, except that the first call should be given to Hindus if they are willing to adopt the waifs of their own country. If they are not, others should be allowed to come forward. It is pure clap trap to talk of the religion or morality, or for that matter the caste of those Dheds, Bhils and Kolis who are left on our hands. The Missionaries (many of them shrewd Americans) will give them a better code of morality than their fathers ever had, and in their industrial schools will make them intelligent craftsmen instead of sending them to swell the ranks of unskilled labourers. It is good for the State that they should have the making of the boys, and it certainly is anomalous to subsidize institutions which the Hindus fail to support in order to keep them out of the field and to do so out of funds mainly subscribed by non-Hindus.

Briefly, I think, it should be provided that the charitable relief fund should not be spent on Object II unless and until it appeared that local agencies failed to meet the need.

104. On this subject I cannot do better than append copies of a few of the telegrams and letters that passed about the grass expected from the Central Provinces. 20 trucks a day from the beginning of the year 1900 and a total of 12,000 tons were promised us from that quarter. Mr. Wroughton will doubtless inform the Commission how much actually was sent and Mr. Fernandez, Conservator of Forests, Central Provinces, will be able to say how far the short-

No. 1368 of 9th February 1900, from the Commissioner to Conservator of Forests, Central Provinces.

Telegram No. 128, from Conservator in reply.

Telegram No. 48, to General Traffic Manager, Indian Midland.

Telegram 55, from General Traffic Manager, Indian Midland Railway.

Telegram 18, from Conservator of Forests. Central Provinces.

Letter No. G. G. 402 of 10th May 1900, from General Traffic Manager, G. I. P. Railway, to Commissioner.

Telegram of 26th May 1900, from Commissioner to Conservator of Forests, Central Provinces.

Telegram of 26th May 1900, from Conservator of Forests, Central Provinces.

Telegram 285, to R. Wroughton, Esq.

Telegram 272, from Conservator of Forests, Central Provinces.

Telegram 290, to Conservator, Central Provinces.
Telegram 337, to Traffic Superintendent, B. B. & C. I. Railway.
Telegram of 17th June 1900, from J. H. Abbott.
Letter No. 3333 of 16th June 1900, from Conservator, Central Provinces.
D. O. letter of 9th July, from Mr. Hanson, General Traffic Manager.
Telegram from Mr. Mehta, dated 6th May 1900.
D. O. letter, dated 19th May 1900, from E. E. Fernandez, Esq.

age was due to want of railway facilities. The last telegram was from Mr. Abbott, who had contracted to supply cattle. It will be seen from the papers quoted in the preamble to Bombay Government Resolution No. 2668 of 29th June 1900, that the Indian Midland Railway refused to grant liberal concession for the carriage of cattle and later on refused to supply wagons at all. Such reduction as they did make was summarily cancelled on 1st October. As a matter of fact nearly all the cattle have been trained at Rutlam so as to avoid the Indian Midland, who having no direct interest in the welfare of Gujarát, have not been at all forward to help at any time of the year.

With regard to the grass imported from West Khándesh and from Thána the deadlock began about February, in which month it was reported that as things were going on it would take eight years to move off all the grass awaiting carriage at Navápura. The firm of Jiwanji Jamsetji Sethna & Co. complained that they had 6 lákhs lbs. ready pressed under contract at the same place and could not get it away. At Songadh it was said that grass was lying there which had been bought by cultivators 2 or 3 months before. At Vyára there was the same story. All that was said, however, was not strictly true. Upon one petition the Traffic Manager, B. B. & C. I., explanied that the consignors would not take wagons that were offered long before but insisted on open wagons of a particular type in order to save a trifle in freight.

I would refer to Bombay Government Resolution No. 2307 of 17th May 1900, to the preamble of which I have not much to add. Also to the B. B. & C. I. Railway Traffic Manager's No. 2332 of 16th March, forwarded to the Famine Department with the Public Works Department Memorandum No. 693 of 27th idem, which states the case from the Railway point of view.

The B. B. & C. I. Railway authorities were most anxious to help. They carried grass at a reduced rate and for cattle charged only 0-2-6 per wagon of animals per mile instead of the usual rate of 0-5-6. At the beginning of the year to facilitate the import of green grass which had to travel quickly for fear of fermentation they put on a special daily goods train. They ordered that preference should be given to cultivators in allotting trucks, though this well meant order was easily evaded. Finally, though there was much delay, I believe that all the grass on their line was eventually conveyed and that none was left to waste for want of carriage.

No. 1368, dated 9th February 1900.

From—The Honourable Mr. F. S. P. Lely, I. C. S., Commissioner, Northern Division.

To—E. E. Fernandez Esquire, Conservator of Forests, Northern Circle, Jabalpore.

SIR,

I have the honour to forward you copy of a telegram sent to you at Hoshangabad to-day and to inform you that we are in very great need of grass. Valuable animals are dying in great numbers for want of it. I have some knowledge of the difficulties which have beset you and prevented you from sending us twenty trucks per day as you hoped to do, but if, as I suspect, the chief trouble now is the failure of the Railway to supply trucks, I shall be very much obliged if you will inform me of the facts, in order that I may at least do what is possible on this side.

I have, &c.,
(Signed) F. S. P. LELY,
Commissioner, Northern Division.

P. S.—Three consignments were received at Godhra from Hoshangabad on 12th and 30th January and 4th February, payment for freight of which *was demanded here*, and another consignment has arrived to-day, payment for which is also demanded. I trust you will arrange for payment in all cases by credit notes to avoid confusion.

Telegram, dated 13th February.

From—The Conservator of Forests, Northern Circle, Jabalpore;

To—The Commissioner, Northern Division.

128. Slow despatch grass due to failure Indian Midland to supply wagons; have wired for open trucks with paulins; will communicate result.

Telegram (State Deferred), dated 14th February 1900.

From—Commissioner, Northern Division;

To—General Traffic Manager, Indian Midland Railway, Jhansi.

48. Very great distress and loss of valuable cattle caused by slow despatch of grass from Conservator of Forests, Central Provinces, owing to want of wagons. Please do what you can to help us.

Telegram, dated 15th February 1900.

From—General Traffic Manager, Indian Midland Railway;

To—Commissioner, Northern Division.

55. Your 48. We are doing our utmost to load grass.

Telegram, dated 4th May 1900.

From—The Conservator of Forests, N. C., Central Provinces;

To—Commissioner, Northern Division.

18. Your No. 209. Please see my wire 17 and endorsement. 2,500 tons more can be baled up to end May, total

4,000 tons. Punctual despatch depends on obtaining wagons. Please press G. I. P. authorities. Am doing same.

GREAT INDIAN PENINSULA RAILWAY COMPANY.

General Traffic Manager's Office,
Bombay, 10th May 1900,

No. G.G.-402 of 1900.

To—The Commissioner, Ahmedabad.

Sir,

With reference to your wire of date regarding wagons required to load grass at Jabalpore and other places, I wired you as follows:—

"Your telegram of date. We will do our very best, but there is a heavy demand for wagons."

We are very much pressed for wagons just now, but I have given special orders on the subject to our District Traffic Superintendent, Jabalpore, and I hope, as far as possible, the Government requirements will be met.

I have, &c.,
(Signed) (Illegible),
For General Traffic Manager.

Telegram (State Deferred), dated 26th May 1900.

From—Commissioner, Northern Division, Ahmedabad;
To—E. E. Fernandez, Esquire, Conservator of Forests, Jabalpore.

We shall be in great need of grass at Sabarmati. Can you send during the month of June 15 lákhs pounds?

Telegram, dated 26th May 1900.

From—Conservator of Forests, Jabalpore;
To—Commissioner, Northern Division, Ahmedabad.

Have more than fifteen lákhs pounds baled for despatch, but even G. I. P. Railway have ceased giving us wagons. If wagons can be obtained *vid* Khandwa, will Bombay Government agree to pay extra freight, about Rs. 3, per ton?

Telegram (State Deferred), dated 27th May 1900.

From—Commissioner, Northern Division;
To—R. C. Wroughton, Esq., Conservator of Forests, Poona.

285. Fifteen lákhs pounds more grass urgently wanted in June, but Fernandez wires even G. I. P. Railway have ceased giving wagons. If wagons can be obtained *vid* Khandwa, will Government agree to pay extra freight, about three rupees per ton. I strongly recommend it.

Telegram, dated 30th May 1900.

From—Central Circle, Poona;
To—Commissioner, Northern Division, Broach.

272. Government sanction Khandwa route. Will you arrange with Fernandez?

Telegram (State Deferred), dated 28th May 1900.

From—Commissioner, Northern Division, Ahmedabad ;

To—E. E. Fernandez, Esquire, Conservator of Forests, Jabalpore.

290. Bombay and Baroda Railway has agreed to give sixty closed trucks for grass from your Indian Midland stations. These will be enough for fifteen lákhs in June. Please send these fifteen lákhs to Sabarmati and the rest as heretofore.

From—Commissioner, Northern Division, Ahmedabad ;

To—F. W. Hanson, Esquire, Traffic Superintendent, B. B. and C. I. Railway, Railway Service ;

337. The Forest Department, Jabalpore, report they have not received your wagons at Jhansi yet.

Telegram, dated 17th June 1900.

From—J. H. Abbott, Sehore ;

To—Commissioner, Northern Division, Broach.

Please order Mr. Fernandez give me some grass trucks the supplying petty native contractors not one for me.

No. 3333, dated Jabalpore, 16th June 1900.

From—E. E. Fernandez, Esq., Officiating Conservator of Forests, Northern Circle, C. P.

To—The Commissioner, Northern Division, Ahmedabad

Sir,

Referring back to your telegram No. 290, dated 28th May 1900, I have the honour to inform you that in a letter just received by me the Range Officer, Itarsi, reports that 35 B. B. & C. I. Railway wagons for back loading were received by him. You will thus observe that the responsibility of failure to send the full supply of grass promised does not rest with us here.

I have, &c.,
(Sd.) E. E. FERNANDEZ,
Officiating Conservator of Forests,
Northern Circle, C. P.

BOMBAY BARODA AND CENTRAL INDIA RAILWAY,
INCLUDING RAJPUTÁNA-MÁLWA RAILWAY.

No. T-24784.

General Traffic Manager's Office,
Bombay, 9th July 1900.

DEAR MR. LELY,

Since I wrote my letter No. T-2478/3 of the 12th ultimo, we have handed over to the Indian Midland Railway 247 wagons for back loading of cattle and 35 for back loading of grass, making a total of 438 for cattle and 112 for grass.

I trust you are receiving your supplies of grass from Indian Midland Railway stations fast enough. Mr. Mollison wrote to me some time back to say that the supplies he had been receiving were sufficient; but if more wagons are urgently required, I will make an effort to hand over as many as you require to the Indian Midland Railway.

Unfortunately we have just been called upon to supply rolling stock for the conveyance of the third Bombay Cavalry from Nasirabad and Neemuch to Calcutta, *viz.*, Rutlam, on their way to China. This will mean that we shall have to set aside about 90 of our covered wagons to convey horses from Rutlam and these wagons will have run through to Calcutta. On their way back empty I can arrange for the Indian Midland Railway to make them available for the loading up of either cattle or grass according to your requirements, whichever may be most urgently needed, and I shall be glad to hear from you in regard to this.

Yours sincerely,
(Sd). F. HANSON.

F. S. P. LELY, I. C. S.,
Commissioner, Northern Division, Ahmedabad.

Telegram, dated 6th May 1900.

From—Mehta, Bhopal;

To—Commissioner, Northern Division.

Indian Midland has stopped booking cattle entirely.

Jabalpore, 19th May 1900.

MY DEAR MR. LELY,

Yours of 15th instant. The grass is being sent according to your latest instructions, but the complaint is still that an insufficient number of wagons is supplied. At Sohagpur, owing to this difficulty I had to stop all pressing on the 13th instant: this is a great pity as we were pressing as many as 80 tons daily. I have been writing again to the General Traffic Manager in Bombay. The case of the Saugor grass is hopeless. We shall have about 3,000 tons on our hands when the rains have set in.

Yours sincerely,
(Signed) E. E. FERNANDEZ.

104 (*a*). The orders of Government Resolution No. 255, Famine, dated 25th January 1897, are doubtless before the Commission.

The Commissioner was kept informed by the Collectors of the total imports and exports of grain in their districts by noting the figures in the copies of weekly season telegram (Form 13, Famine Relief Code).

During the 13 months from August 1899 to August 1900 the net imports by rail into Gujarát amounted to 105-19 lákhs of maunds, equivalent to 6⅔ months' supply at the assumed rate of half a maund per month per head of population. The *exports* were comparatively very small and mostly within the limits of Gujarát and Káthiáwár, except in the case of Surat, which exported to Bombay a small quantity of food-grains, apparently pulses, locally grown and Rangoon rice to Nandurbár and Navápur.

There was no import or export by road, and I believe little by sea.

106. Statements to elucidate both points are appended. Unirrigated double cropping is confined

to (1) rice land which sometimes produces a second crop of "wál" and to (2) small special tracts of land charges with moisture (called "Beja" land), usually the bed of a blind river. In Surat the area of double-crop rice land is large because of the greater rainfall and possibly because the soil is in places more retentive of moisture. There is a falling off in all the districts during the last five years, which is probably connected with failure of the September and October rain. Without this later rain there can be no second crop.

Area cropped more than once.

	Ahmedabad.			Kaira.			Panch Mahá'ls.			Broach.			Surat.		
	Area cropped more than once.	Area cropped with irrigation more than once.	Total.	Area cropped more than once.	Area cropped with irrigation more than once.	Total.	Area cropped more than once.	Area cropped with irrigation more than once.	Total.	Area cropped more than once.	Area cropped with irrigation more than once.	Total.	Area cropped more than once.	Area cropped with irrigation more than once.	Total.
1894-95 ...	35,371	646	36,017	64,457	1,369	65,826	90,030	11	90,041	3,710	8	3,718	68,905	55	68,960
1895-96 ...	18,457	1,326	19,783	22,417	1,214	23,631	78,079	11	78,090	488	16	504	64,396	56	64,452
1896-97 ...	25,875	2,845	28,720	29,574	2,961	32,535	48,482	...	48,482	271	24	295	20,841	43	20,884
1897-98 ...	25,435	2,060	27,495	29,740	799	30,539	66,415	6	66,421	1,153	21	1,174	55,252	228	55,480
1898-99 ...	21,899	1,782	23,681	35,161	1,232	36,393	84,399	1	84,000	851	12	863	46,956	62	47,012

Statement showing Percentages of Area under "Food" and "Non-food" Crops.

	1894-95.		1895-96.		1896-97.		1897-98.		1898-99.	
	Food.	Non-food.	Food.	Non-food.	Food.	Non-food.	Food.	Non-food.	Food.	Non-food.
Ahmedabad ...	76	24	72	28	70	30	76	24	69	31
Kaira	93	7	92	8	92	8	93	7	93	7
Panch Maháls ...	89	11	91	9	90	10	89	11	90	10
Broach	60	40	49	51	57	43	56	44	63	37
Surat	75	25	77	23	73	27	81	19	79	21

108. The chief variations from the Code have been as follows.

Section 74.—The suggestion of the Government of India to give one pice per day for the infant was tried with success. At first it was attempted to give milk, but that was most inconvenient and often failed altogether owing to late supply or short supply by the contractor. The objection to giving cash to parents for children does not apply to cases where the parent may permissively eat the food herself. On some works I noticed large numbers of nursing mothers at work, whether by choice or not I cannot say. Whether it is required of them or not there is all the more reason for giving them extra food. I should excise the words "if not required to work" from Section 74 of the Code.

A nursing mother ought to get extra allowance *ipso facto.*

Section 82.—There were slight divergences from the rule. Generally the twice-a-week payment was continued for only a week, and then weekly payments were begun. In Ahmedabad one anna only per day was paid for the first three days, the balance on the fourth, and thereafter the full wages weekly. In the Panch Maháls on the Commissioner's second visit, it was held to be absolutely necessary in that district to make daily payments throughout, and in order to supply the Public Works Department with enough cashiers, a large number of schools were closed and the masters put on the work.

It is a general opinion that even the limited concessions of the Code were not perfectly carried out owing to the want of cashiers. It is certain that some workers did not get the first daily payments, and having nothing to eat left in despair, or sold or pledged their clothes or cooking pots with evil results to health. Either they did not apply for the wages at the right time or to the right person, or the staff was not strong enough to meet the demand.

To meet the Bania, who would not supply grain on credit to people he did not know, a system of "chits" issued every evening by the mukádam of the gang was introduced in some places, but did not work altogether well.

I understand the objection of the Public Works Department to daily payments to be not only the excess of work they cause and the insufficiency of their staff to cope with it, but also that the system encourages people to go from one work to another which adds greatly to the labour of the officials and taxes the strength of the people themselves. This objection would apply even more strongly to the Code system, as a man after the first week would be tempted to go elsewhere to again be treated as a new arrival. On the whole, I am of opinion that in most localities the present Code rule is sufficient, always provided it is completely carried out. Where, however, the people are of a backward class, utterly incapable of self-control, daily payments throughout are necessary. All are agreed that the Bhils and Kolis of the Panch Maháls and perhaps of Modása, if they get a few days' wages at a time, spend them all at once on luxuries and leave themselves without anything to eat for the rest of the week.

Section 83.—It was found that when the rains began, the plan of giving full wage on wet days had the most undesirable effect of inducing the people to remain on the works instead of going off to the fields. Naturally they preferred living in idleness on full wage to taking their chance of what they could get in the villages. This too was at a critical time when the necessity of clearing the works was pressing. Consequently the Commissioner, with the subsequent approval of Government, ordered that

only the minimum wage should be given in such cases.

Section 92.—Please see answer to the question about Special Civil Officers.

Section 126.—It was found impossible to collect the children in some places owing to the opposition of the mothers. The kitchen or separate nursery was viewed with much distrust. On my visiting a work close to the town of Viramgám my approach caused a combined rush of mothers to the nursery. They tore down the fence and carried away the children, the cry being raised that I was coming to take them off to Ahmedabad and thence to unknown worlds. Gradually, however, a better feeling was making way, and undoubtedly the Code rule is sound and should be enforced with care and firmness.

Section 150 (e).—No attempt was made to insist on work from Parda-Nashin women. The provision of raw material and accounting for it would tax the Local Agency, and the women, being for the most part feeble and unaccustomed to work, would not take to it without much difficulty. In my opinion the condition is either impracticable or not worth the trouble of applying it.

Section 151.—It was decided by the Government of Bombay (I think rightly) that nothing could be done by Government under this section. Nor did any Municipality take up the matter. The number of weavers in this division is not large and many of them were employed by private agencies, chiefly the Missions, who sold the cloth as best they could. Particulars are given elsewhere. The Missionaries do much of their work among the Dheds (to which class most of the weavers belong) and know a good deal about them. If it is necessary to give Government help, it might take the form of a subsidy to such private agencies as may be fitted by knowledge and probity to expend it.

Sections 70 and 78.—The note to the definition of Class IV has been "objected to as an over-refinement". I think the general opinion is that, "nominally worked" people are out of place on a regular relief work. There is the difficulty of finding anything suitable for them to do and the difficulty of supervising them so as to make them do it. Persons, who are too feeble for anything more than "purely nominal" employment, should be kept in the poor-house or kitchen until they are fed up or at least they should be put on small jobs in and about the place itself. Nothing is gained by cumbering the regular work with them.

Chapter V.—Important expansions of village dole beyond the limits contemplated by the Code took place towards the end of the year. The outbreak of cholera in May dispersed the people in all directions and to meet the situation temporarily, orders were issued to put all who were in want on the dole. Further, when the cultivating season began, provision was made for those who had no

other means of subsistence and who were engaged on *bonâ fide* agricultural work. Those who were working for people of means were to be held to have other means of subsistence in the shape of wages from their employer. Copies of the orders issued are appended to the answer to question 77.

Perhaps may be mentioned here as not specifically provided for in the Code the Ambulance arrangements and the distribution by Patels to emaciated village children of Swiss milk and Mellin's food, a special form of village dole. A copy of orders on both subjects is appended. The latter scheme was at the expense of the charity fund, and therefore does not strictly come within the scope of the Code, but I lay stress on the fact that a severe famine lies with special weight upon the children who are economically more worth saving than decrepit adults. From all I can gather, the mortality among them has been disproportionately heavy. The amount distributed direct from the Commissioner was, as follows, besides what was obtained by the Collectors out of their general district grants:—

Swiss milk	...	...	17,232 tins.
Mellin's food	...	...	14,088 large sized bottles.
Nestle's food	...	...	600 do.

The plan was not developed by District Officers so widely as I could have wished owing to their doubt whether Patels were to be trusted. There was an inclination to undervalue the better class of these men, and also to forget that a certain amount of abuse is inseparable from any agency and must be allowed for just as an Engineer allows for "friction."

Lastly I note a supplementary operation not provided for in the Code, *viz.*, rural dispensing in view of the after effects of famine combined with the unhealthy climatic conditions of the year. In the months of October, Novemder and December fever is always rife in Gujarát, causing much mortality and enfeeblement. It was recognised that the year acting on a people whose vitality had been lowered by famine it would play havoc. To it was added much diarrhœa and dysentery. With the sanction of Government a service of agents was organised by Major Dyson, Deputy Sanitary Commissioner, to travel about the villages distributing simple medicines. They numbered nearly 500 and comprised Revenue Officers of all grades from Mámlatdárs to Talátis, Village Patels, Circle Inspectors, Assistant Surgeons (several of whom were lent by the Government of India), Hospital Assistants, Vaccinators, Mission Agents and other private volunteers, to each of whom was allotted a group of villages. Every non-professional was furnished with a Circular of simple instructions drawn up by the Sanitary Commissioner. Pills for cough, diarrhœa, cholera, dysentery and fever (quinine) were supplied from the Medical Stores and also from Treacher and Co., the latter at a cost to Government of Rs. 25,382-6-2. The grand total supplied was 3,317,000 pills in addition to large quantities of quinine from Famine

Hospital Stores which have been utilised. All the quinine has been used and more than double could have been had it been available at the right time. Regular operations began in the second week of October and ceased on 31st December, but the balance of medicines is being distributed by permanent district officials and others still retained for famine work.

It is the general opinion that the effort has done much to palliate the prevailing sickness.

No. 3554 OF 1900.

Camp Surat, 31st March 1900.

CIRCULAR.

Numerous deaths occur among people who wander about the country without food and are attracted at last towards some town or large village. Ignorant of the relief provided by Government or unwilling to go to it they linger on the road-side or in the fields until they die of starvation. This is not only in itself a regrettable loss of life, but it creates a public scandal and discredits the arrangements made by the local officers.

2. The Commissioner thinks a rough ambulance system should be established at every poor-house and kitchen (whether on a relief work or not) and at every town or large village where there may be no poor-house or relief work but where famished vagrants are likely to be found.

3. At all these places as many stretchers as may be needed should be kept. They can be made very easily and cheaply of 2 stout bamboos and a piece of canvas. They are kept already in many places, but they should henceforth be part of the regular equipment of every poor-house and kitchen—as much as the hutting—and should be charged to the general cost. In places where there is no poor-house or kitchen they should be kept in the Chowra or other public place and their trifling cost may be defrayed out of the Collector's grant for gratuitous relief in villages.

4. The bearers should be provided as follows:—In kitchens on relief works a sufficient number should be told off to each stretcher from the relief workers. In poor-houses a sufficient number should be added to the staff to man the requisite number of search parties, and charged to the general establishment. In Municipalities which contain no poor-houses and especially in those near which there is a relief work kitchen the duty of keeping up a sufficient number of bearers fairly belongs to the Municipality who should be asked with the least possible delay to organize search parties and have exhausted wayfarers carried to the nearest place where they will be attended to. In some large villages the system should be introduced though there is no Municipality or poor-house or kitchen near. Then after giving a dole to the patient, if necessary, the patel should send him on a stretcher with bearers to the nearest poor-house or kitchen with a chit which will entitle each bearer to 2 pice *per mile* out of the Superintendent's or Special Civil Officer's permanent advance.

5. For every poor-house or kitchen in or near a Municipality certain areas all round the town should be roughly indicated and they should be examined at fixed intervals by search parties consisting of bearers with one or two stretchers accompanied by some respectable person. The Mámlatdár can arrange with the Municipal Commissioners to undertake this task—one or more to each area, or failing Municipal Commissioners he may induce other benevolent men to take it up. Each area should be searched every other day or more.

6. In villages the patel should have the fields surrounding the village searched every day.

7. On relief works it will perhaps be impossible to organize search parties, but it should be impressed on all the staff that they should report any person they may see or hear of in extremity to the Special Civil Officer who shall at once send out a stretcher with bearers.

8. Care should be taken not to relieve in this way any except those who are really exhausted and in danger of starving to death.

F. S. P. LELY,
Commissioner, N. D.

No. 7124 OF 1900.

Camp Broach, 22nd June 1900.

CIRCULAR.

Much is said both officially and unofficially about the importance of enlisting the help of private persons in the work of famine relief. District officers generally find such help to be but a broken reed, but no effort should be spared to stimulate patels and other influential men to take a hand. Where a "Panch" charged with administrative duties is useless it often happens that some worthy individual charged with some specific duty will give his mind to it. The Commissioner is very strongly of opinion that much may be done in this way for the care of the weekly children in a village. He knows by experience this year that district officers may, by a little personal influence and explanation, get a trusty patel to take charge of a few bottles of Mellin and prepare it and feed with it the under-fed children daily. The Commissioner has already sent some consignments of Mellin and milk to various officers for distributing in this way, and he is ready to send many more. He would specially ask the Collectors to communicate these remarks to any of their subordinates who will take the matter up keenly and to let the undersigned know their names. The last consignments were sent to the following officers in the Ahmedabad, Kaira, Panch Mahâls and Broach Districts.

* * * * *

(Signed) F. S. P. LELY,
Commissioner, N. D.

/0D/

The Hon'ble Mr. F. S. P. Lely, C.S.I., I. C. S.

Supplementary answers by the Hon'ble Mr. F. S. P. Lely, Commissioner, N. D., to the questions of the Famine Commission.

11. As remarked in answer to questions 15 to 18, tests works had no very marked place in the course of action. The need for poor-houses was considered at an early date, so early as August, and soon after large works were under weigh, they were taken in hand to provide for wanderers who would not go to works and for whom private charity was beginning to fail. Ten poor-houses were sanctioned in Ahmedabad in November, and two more in January. Two more were started in Ahmedabad City by private agency. In July, when the holding off of the rain threatened to swell the number of helpless vagrants, a special refuge for children was opened and another for adults was projected, but not established as the rain fell. One was also opened in Kharaghora in July. In Kaira District sanction for four was applied for and granted in October, and another in December. One more was opened on 1st January, another during the month of January, another in March, and another in June. In Broach District the Collector was authorized on 23rd November to open one at all the head-quarter stations of tálukas; six in all. The Panch Mahál was rather behind hand. The Collector reported on 10th January, having ordered the opening of one at Dohad and thought one would also be necessary at Jhalod, which he was about to visit. Others were afterwards opened at Halol, Kalol, and Mehlol. It should be noted that the kitchens on works were used as poor-houses in this district.

(*c*) Kitchens on works had already been opened on the large works simultaneously with and often before the introduction of task work.

Village kitchens were not established till a much later stage. (*Vide* answer to questions 74—77.)

Organized private charity at an early stage chiefly took the form of cheap grain shops. The Government forests in the Panch Mahál were opened on 1st August.

12. Immediately above the ordinary village staff were Circle Inspectors. Extra officers of this class were appointed in the month of October. Government on 11th October authorized the Commissioner to appoint them for purposes of relief inspection in any district when the necessity was shown. With the sanction of the Government of India pay at Rs. 20 per month instead of Rs. 15 and 12, as given in the famine of 1896-97, was fixed in order to secure reasonably honest and competent men. Travelling allowance up to Rs. 15 per month was additional. The average worked up to was one man

for every 15 villages and late in the year 12 villages, but this scale was not reached everywhere, partly from the closeness of the villages to one another, and partly because (especially in the Panch Mahâls) it was impossible to get the right sort of men. The Circle Inspectors submitted a weekly diary to the Sub-divisional officer. To each táluka early in December, or thereabouts, an extra Aval Kárkun was appointed, who generally relieved the Mámlatdár of all criminal work, and other current work, so as to leave him free for famine. The division of duties varied in different tálukas as found convenient. Sub-Judges, as far as possible, relieved Sub-divisional officers of criminal work. The Aval Kárkun or the Mámlatdár toured among the villages and had to note in every village the date of the last visit of the Circle Inspector. His diary was sent through the District officers to the Commissioner. The Sub-divisional officer (Assistant or Deputy Collector) visited as many villages as possible and every work from time to time, submitting his diary every week to the Collector, who sent it to the Commissioner. As the year wore on officers of the Staff Corps, Salt, Customs, Forest Departments, and Europeans specially engaged, were put on either to take charge of large works or special areas.

36 & 37. In my opinion the principle of a penal wage is entirely sound, but in practice it is a very dangerous weapon and should only be trusted to a high class Special Civil Officer. Failure to work, though apparently due to intentional contumacy, is very often not really so. Ill-health and (quite as often) constitutional inaptitude for sustained labour are accountable. The Bhils of the Panch Mahâls, for instance, never did a continuous day's work in their lives, nor have their forefathers for a hundred generations. They simply cannot do it, and to enforce a penal wage below their subsistence level upon them will lead to starvation. Even among more industrious classes the Special Civil Officer should as a preliminary pick out and set aside all workers below the average either through ill-health or under-size. Indeed, it would be better to reverse the process and select the able-bodied and strong for the application of the lower (penal) minimum. As pointed out under question 92, the penal wage will not often operate to prevent people coming on who do not need relief. It is assumed that those people have means at home and only come to work to get a little pocket money. They can afford to, and will, continue whether they get 3 pice or 6 pice. The people who will be discouraged from coming are those who have nothing, who cannot live on the reduced wage, who cannot or will not earn more, and who, therefore, give up in despair.

66. To save the cattle the following measures were adopted:—

(1) Takávi was liberally granted for the purpose of sinking wells to grow fodder and for

buying tackle for existing wells. Proclamation was made that the assessment would not be levied on land put under a fodder crop, and leave was freely granted to sow waste Government land, river-beds and the like.

(2) Cattle camps.

(3) Deportation to distant grazing areas.

(4) Import of grass from Central Provinces, Thána District, and West Khándesh for sale at reduced price.

(5) Towards the end of the year this grass was sold at a nominal price of Rs. 2 per 1,000 pounds, the difference between that and the Government price being borne by the Central Charity Fund.

I will only notice the deportation scheme, Mr. Mollison having dealt with the rest.

A conference was held of officers concerned at Pálghar to arrange a scheme for sending cattle to the Government forests in Thána District and taking care of them. Some private gentlemen and the Rája of Dharampur also offered to take charge of limited numbers. (For more details please see Government Resolution No. 7240 of 11th October 1899.) At first the people would not listen to the proposal. Stories were circulated that it was a device to get animals out of Gujarát to be sent on for the supply of beef and draught cattle to the soldiers in South Africa. By degrees they were persuaded. A batch of about 50 head was sent at Government expense. Delegates who went with them came back and reported that the Thána District was a land of plenty. In the end there was an almost unmanageable rush for trucks at Ahmedabad and Broach. It was thought wise, however, to limit the number to about 15,000. The freight, except in a few cases where the owner was able to pay it, was defrayed by advance of takávi, and in Ahmedabad by an Association which supplied the money on condition that they were to take at the end a certain proportion of the saved cattle. The B. B. & C. I. Railway Company liberally reduced their rates from Re. 0-5-0 per truck per mile to Re. 0-2-6 for a full train load.

It was known that schemes of this sort in the Deccan had mostly failed, but hope was placed on the organisation for receiving the animals, for removing them from place to place, so as to secure to them constantly good pasture and water, for generally looking after them, and for returning them safely by train. Mr. G. Monteath, I. C. S., was placed in command, assisted for some months by Mr. A. L. M. Wood, I. C. S. Under them was the Extra Assistant Conservator of Forests and the local Forest staff. At the station of despatch every animal was branded under the supervision of Mr. P. R. Mehta. The owners were required to send and maintain a herdsman for every 50. The results were as follows :—

(1) Total number sent from Gujarát ...			15,749
(2) Number died or strayed on their way to the grazing grounds			794
(3) Remainder that reached the grazing grounds			14,995
Deduct—			
(4) Number strayed		1,065	
(5) Deaths—			
(*a*) Ordinary causes .	4,735		
(*b*) Diseases	1,840		
(*c*) Accidents ...	68		
(*d*) Causes not distinguished	2,088		
		8,731	
			9,796
(6) Remainder			5,159
(7) Of the remainder number returned to the owner			5,153
(9) Balance with the officers in charge of the operations in the forests			6

These figures, however, are not altogether correct. It is reported by the Collectors that a very large number of cattle were brought back by the owners on their own account at various times during the year, without the intervention or even knowledge of those in charge. It is impossible to say accurately how many, but they probably account for those under the head of "strayed." If so, the number saved may be taken as 7,000 instead of 5,159. 3,200 head were also sent from Ahmedabad District to the Dharampur State, of whom about 2,800 are reported to have returned. Many were taken on foot from the Broach District to the Rájpipla Hills and some by train by private capitalists to the grazing grounds of West Khándesh. There are no statistics of these, but the mortality is said to have been very great. The causes of the mortality among those sent to Thána were as follows :—

(1) Some were already debilitated by the scanty diet of leaves they had lived on and could not stand the fatigue of the journey.

(2) Most of the herdsmen ran away either because they did not like the strange country, or because their wages were not remitted. Thus the cattle had no individual care.

(3) Consequently, they got mixed with local cattle and caught rinderpest and foot-and-mouth disease. An experienced Veterinary officer was sent, but about 400 succumbed.

(4) Consequently, too, in a rough and rocky country, to the like of which the cattle were altogether unaccustomed, many of them met with accidents.

(5) But the time of trial came when the pasture dried up, as it did early this year owing to the short rainfall. Grass had been cut and stacked in readiness, but it contained little nutriment.

Mr. Mollison gives, I believe, an analysis of this dry Thána grass and describes the effect of it upon the stomachs of the animals. Major Morgan, Superintendent, Civil Veterinary Department, who made an inspection in April, reported that the animals, though they got enough, "are dying of starvation pure and simple as there is no disease whatever among them. They are starving while they eat." It was, in short, with them as with their masters. Being soft and unaccustomed to rough food or a rough life, they could not stand a hard life in a rocky and jungly country with a strange climate, strange surroundings, strange water and coarse food. Yet the Deccani cattle brought down annually by Gowlis and Brinjaris thrive under the same conditions.

The larger proportion of cattle saved in Dharampur illustrates the above. The Rája distributed them among his villagers with orders to treat them as their own. They thus got better care and better food.

In spite of the mortality, I cannot admit that the effort was a failure. The 7,000+2,800 that returned alive would certainly have died if they had stayed at home. At another similar crisis it is not likely that the people after the late experience would willingly let many cattle go, but I should give them the chance. I should, however, make no attempt to look after the cattle on behalf of Government. The forests should be free and the railway freight should be provided, but the people should be made entirely responsible for providing herdsmen to take charge. Last year the herdsmen were inefficient or ran away, and the Government officers were left to make arrangements for filling their places.

Generally speaking, I would meet the cattle difficulty by importing as much grass as the railways could carry. This, if in sufficient quantity, would enable the average cultivator to save some or all of his draught animals. In cattle camps I would gather cows and a certain number of bulls carefully selected both for breed and condition. These are the first which the cultivator allows to die, but they are, to the more distant vision of the State, by far the most valuable. A few thousand well-bred cows and a few score bulls would be an almost priceless property now. (I do not mean in the market, for, owing to the depletion of many in the country, they would command but a small price.) Towards the end of the year a grant from the Charitable Fund might well be applied, as last year, to the supply of grass at a nominal rate to cultivators who could not afford to pay the Government reduced rate. This was a great boon and would have been a greater if the supply had been larger.

Famine

Report on the condition of the cattle sent from Gujarát to Government forests in the Thána District.

No. 179.

FAMINE DEPARTMENT.

Bombay Castle, 11th January 1900.

Letter from the Commissioner, N. D., No. 6651, dated 31st December 1899 :

"I have the honour to report that sickness having been reported among the cattle sent down to graze in the Thána District, I arranged that Mr. Judah Hyam, a very competent veterinary graduate at present employed on the cattle camps in Ahmedabad, should go down and advise and report.

"2. The total loss up to the 15th instant has been as follows :

1.	Rinderpest	234
2.	Foot-and-mouth disease	148
3.	Malignant sore throat	14
4.	Ailments caused by over-eating on first arrival, cold nights, &c. ...	189
5.	Natural causes	506
6.	Misadventure...	18
		1,109

"3. This amounts to a little over 7 per cent. of the total and is to be regretted, but is not, I think, more than might have been expected. It was always foreseen that the shock of a complete change of country, climate, food and water would be very trying to animals, many of which were already weakened by want. Considering the result of moving cattle in the last Deccan famine, and considering that the Gujarát cattle are much softer and less hardy than the Deccan cattle, I think the number of deaths due to this cause (Nos. 4 and 5) is not very excessive. The deaths by misadventure were also a natural consequence of travelling a long distance into a rocky and hilly country, so different from the level plains of Gujarát.

"4. Mr. Monteath's attention is constantly devoted to keeping the cattle in small herds and segregating the sick. Mr. Judah Hyam thoroughly inspected them and left very sensible written directions for treatment, and I hope disease will not spread further. It is a liability to which cattle are subject in every season, and whether under their owner's charge or not."

RESOLUTION.—Recorded.

J. MONTEATH,
Chief Secretary to Government.

To

The Commissioner, N. D.
The Collector of Thána.
All other Collectors in the Northern Division.
The Survey Commissioner and Director of Land Records and Agriculture.
The Conservator of Forests, N. C.

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89. The mass of persons on relief were of course Dheds, Kolis and other low-castes employed in normal years as day-labourers. But almost from the beginning there were on the works a sprinkling of

Kunbis, Rájputs, Bráhmins, including small occupancy holders. As the year wore on the numbers of these increased, and in June onwards many Patidárs and similar people who had held their heads above help were forced to come on the works. The Grásias of Dhandhuka, the Thakors of Kaira, the better class of Patidárs everywhere remained independent to the end, though often at the cost of much privation. A great many occupancy holders partook of the village dole towards the end of the year.

92 & 93. Generally speaking, the difficulty in this Division has been not to keep away those not in real need, but to get on to the works those who are. "Our dole lists," writes the Collector of Kaira in April, "are full of the names of those who a month or two ago were able and fit, but unwilling to work. Now, only the village dole stands between them and almost immediate starvation, and now they could not work even if they would." I believe the only exceptions of any account were to be found in parts of the Broach District, where the sturdy local Borah cultivators, both men and women, fell to work with a will rather than lose their ornaments and household possessions. Also in some works in the Surat District where the distress was not severe and where the workers consisted chiefly of servants of the better class of cultivators who went off to do their master's work every morning and evening and subsisted on the Government wage. They could be kept well in check by means referred to below.

The chief means adopted with a view to obviate this more or less imaginary abuse was compulsory residence. The first objection to it was the impossibility of enforcing it on a large work. Even if the hardworked establishment was able to detect cases of non-residence by night-musters, there was nothing to prevent the absentees from returning again a few days after. Then again, the check could only, at best, operate on those whose villages were within a few miles of the works. Others have no desire to go to their homes daily. Lastly, there is no doubt that a little relief went a longer way if the people could live and keep their dependants in their own homes amid familiar surroundings. It is difficult to say how they manage it, but the fact remains. A pice at home is worth two pice on a strange work. Similarly, one often saw a bullock kept under its master's own roof tree fed on rubbish, and looking fairly well, while in the Government camp it was necessary to supplement a ration of fairly good grass with a feed of oil-cake in order to keep the animal alive.

Another means was confining all the non-working children and dependants to the kitchen. This undoubtedly operated to prevent that class from coming on unless they were in real need, and was a sound rule.

On some works, especially near large centres of population, persons were not received from within a

five-mile radius, *i.e.* they were promptly drafted off to a| work further afield. So long as the distance was not too great this was unobjectionable.

•In my opinion the influx of non-necessitous people, both in Broach and Surat, and elsewhere, if facts required, could be sufficiently and easily counteracted by a discriminating selection of drafts to other works. This, however, needs a thoroughly reliable Special Civil Officer (*vide* answer under that head). In the month of January on the Mataria Tank Work near the town of Broach about 1,000 Borahs were drafted to a short distance with the result that they returned to their villages. At Amalsád (Jalálpor Táluka) work in Surat, at the time of my visit, such a measure would have emptied the work, without any serious mischief.

109. A certain number of Staff Corps officers were employed. Officers of the Native Army were applied for, but could not be got. Several parties of Native private soldiers were, however, obtained, and did good service in patrolling roads for destitute wanderers and similar duties. More of these men could be very profitably utilized for protecting the water at large relief works as head Mukadams to stir up the lazy to work, &c. &c.

A minor suggestion I would also make is that when an officer is deputed for famine duty, more especially when deputed for charge of large works from other departments, such as the Forest or Customs, an effort should be made to give him some subordinates from his own department. Such men work with more willingness and loyalty under one whose favour it is to their future interest to gain, and thus supply a leaven of strength to what is often a miscellaneous and intractable staff. A Forest Officer, for instance, has a much better grip of his charge if he has at hand a few of his own round and beat guards to work through.

F. S. P. LELY, C.S.I.,
Commissioner, N. D.

1009

The following notes were handed in by the Honourable Mr. Lely at Ahmedabad:—

Note on inception of relief measures in the four distressed districts of British Guzarat.

It was not till the month of October that the people resigned themselves to the prospect of famine. Up till then they would not admit the possibility. The rain was coming within the month of Shrawan; it was coming after the 9th September; it was coming after the first week in October. They might have saved many crops on the ground by irrigation, but they did not. In excuse for their apathy, it may be mentioned that if rain had fallen upon crops already irrigated, it would have rotted them. Meanwhile the people would not set to work to dig wells or make preparation.

The officials were more on the alert. Works were commenced in all four districts in September. Their development throughout the year may be shown once for all as follows.

District.	30th September 1899.	28th October 1899.	25th November 1899.	30th December 1899.	27th January 1900.	24th February 1900.	31st March 1900.	28th April 1900.	26th May 1900.	30th June 1900.	26th July 1900.
Ahmedabad . . .	4	7	12	14	22	30	29	19	22	33	42
Kaira	8	10	8	7	7	12	14	15	17	31	45
Broach . . .	3	13	12	14	15	16	17	13	18	31	35
Panch Mahals . . .	6	5	5	5	5	5	10	9	9	9	8

Thus from November onwards there was in every district at least one work for every taluka or Mahal, in most cases many more. In Panch Mahals there was till February precisely one only for each, for reasons mentioned in the last paragraph of my answers to printed questions Nos. 6, 7, 9.

For the week ending *30th September 1899,* there were already on relief work—all piece work with trifling exceptions.

District.	Total number during the week.	Percentage on population per day.
Ahmedabad	54,646	0·9
Kaira	49,479	0·9
Broach	35,561	1·7
Panch Mahals	28,764	1·5

Kitchens began to be opened on works from middle of September in Ahmedabad to middle of November in Broach. For week ending 30th December 1899, there were a total in kitchens on works of—

District.	Total number during the week.	Percentage on population per day.
Ahmedabad	48,770	0·75
Kaira	13,054	0·21
Broach	35,994	1·50
Panch Mahals	10,122	0·46

Poor-houses followed from the end of October in Kaira to the beginning of December in Broach. For the week ending 30th December 1899—

District.	Total number during the week.	Percentage of population per day.
Ahmedabad	25,691	0·39
Kaira	5,976	0·098
Broach	2,733	0·11
Panch Mahals	Kitchens on works used as poor-houses	

Village dole had been begun in September and October, except in Panch Mahals, where it did not begin in earnest till February. For the week ending 30th December 1899—

District.	On belief works.		On gratuitous belief of all kinds.		Percentage of total on relief of all kinds to total population per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad	223,457	4·0	115,593	1·8	5·8
Kaira	70,842	1·4	26,401	0·4	1·8
Broach	384,420	18·8	49,729	2·1	20 9
Panch Mahals	72,790	3·9	10,790	0·5	4·4

The noteworthy points are :—(1) the low figures of relief in Kaira, (2) the excess over the other districts of persons on relief works in Broach, and (3) the low figures of gratuitous relief in Panch Mahals.

Kaira had made an early start with 8 test relief works in September and the figures on 31st December do not fairly represent what had been done either by way of relief work or gratuitous relief. Against 70,842 on works for week ending 30th December, there had been 83,555 in last week of November, and against 7,371 on village dole for week ending 30th December, there had been 26,808 in week ending 11th November. It will thus be seen there was no delay in beginning. The fall in village dole was owing to the opinion of the Collector that private charity had been rather too hastily forestalled.

The excess in Broach is explained by the following facts :—

(1) The district is largely given up to cotton and has to import food-grain in normal years. Hence the stocks of the latter were even less than in other districts.

(2) The district has been much depressed of recent years, especially in Jambusar and Wagra talukas, from various causes.

(3) There are no forests, no grazing grounds, and very few trees. Hence it was not possible for a large class, as in other districts, to eke out a living by selling sticks, leaves for fuel and jungle products.

(4) Most of the works were carried on from the first on the Code Task system. This attracted a large number from Borsad taluka, in Kaira district, where piece work was still maintained.

(5) Also large numbers flocked on the works from the Baroda State and from the Rajpipla State, on the Southern border, where relief was altogether insufficient.

(6) Undoubtedly many Borahs—a sturdy race—came on a few of the works who were not driven by pressing want. They might have been, and were, as the year went on, checked by drafting to more distant works. Task work was introduced on some works in October and pretty generally in November—too soon on the whole. On the other hand, however, it should be noted that those works continued on the piece work system were also crowded. And fining was rigorously enforced, as appears from a letter of 12th January, from the Collector, complaining that out of 5,451 on the Chanchwal work 2,960 had been fined the previous week, and that out of 3,694 on the Paneshwar work 3,257 had been fined the previous week and 2,945, the week before that.

As for the Panch Mahals the poor-houses were, as noted above, represented by the kitchens on the works. Gratuitous village relief only showed 608 for the whole week. As to this I would note that—

(1) There was more *kharif* in this district to carry the people on a little way than perhaps anywhere else in the 4 distressed districts. In the eastern Mahals in September there was a light rainfall on 3 or 4 successive nights. There were even some decent grass birs which gave labour and also kept the cattle longer, thereby prolonging the supply of meat. The store of leaves was virtually inexhaustible, which had the same result.

(2) Nearly all the people are meat eaters ; and there was an enormous supply of meat. Jungle products also were plentiful and carried them on further than in other districts, both by consumption and sale. Lastly and especially—

(3) Mr. Stewart was deeply impressed with the danger of offering free dole to the Bhils, Naekdas and Colis. He held that they would come readily to works if not too distant, as proved by the test works and other works opened ; but that if they once thought they or their relations would be helped in their villages, the most wholesale demoralizations would result. To give to their relations would be the same as giving it to them, as the Bhils always share the slighest pittance with one another.

The want of grain shops, the long distance between one house and another in the scattered villages, the impossibility of getting in that district good circle inspectors and the uselessness of the village officers were additional, though secondary, reasons for not hurrying on a village dole system. So at first Mr. Stewart threw open the works— kitchens, and those eligible for dole were drafted there. His opinion was confirmed by the effect of the dole later on in the year. The people, when it became known, flatly refused to

work. I would note that the Bhils of Panch Mahals must not be confounded with the Bhils of other parts of India. By race they are doubtless more or less the same, but the railway and good government have left very little of their original quality in them, except a hereditary distaste and incapacity for sustained work, and extreme unthriftiness. They are holders of land direct from Government or regular day-labourers. They kept cattle and got plenty of milk and lived fairly well, though they need less wage than the people of more advanced districts, being by inheritance more inured to hardship and more able to live by their wits.

For week ending 27th January 1900—

District.	On relief works.		On gratuitous relief of all kinds.		Percentage of total on relief of all kinds to total population per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad	329,132	6·0	215,786	3·3	9·3
Kaira	89,586	1·7	40,634	0·7	2·4
Broach	494,352	24·1	113,015	4·7	28·8
Panch Mahals	88,977	4·7	15,414	0 7	5·4

For the week ending 24th February 1900—

District.	On relief works.		On gratuitous relief of all kinds.		Percentage of total on relief of all kinds to total population per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad	568,261	10·3	353,688	5·5	15·8
Kaira	269,734	5·2	93,739	1·5	6·7
Broach	568,626	24·6	127,818	5·3	29·9
Panch Mahals	98,844	5·2	31,329	1·4	6·6

The relative position of the four districts remain pretty much the same during these two months, but the mortality rates begin to vary; in February they are—

	Per mille.
In Ahmedabad	7·49
„ Kaira	7·90
„ Panch Mahals	12·58
„ Broach	10·230

They seem to bear no relationship to the amount of relief, for Broach, which had by far the largest number on relief, comes second on the death-list, while Kaira with about the least proportion on relief shows about the best return of mortality. This suggests hesitation before ascribing the increasing mortality in the Panch Mahals, to the delay in intra-village relief. I attribute a great deal of it to refugees from Native States. A glance at the map will show this district to be interlaced and surrounded by small States of the Rewa-Kantha, many of which had no funds. It is believed by good observers that the returns of relief made even by the larger States were bogus. Crowds of starving people now began to stagger thence into the towns of the British district, past all help and marked for death whether taken into the poor-houses* (which were started separately this month) or not.

* A very successful poor-house at Mencol is not included in the figures at all, because it happened to be Talukdari.

The residents did not die of sheer starvation, but rather of *unwholesome* food. There were abundant jungle products, roots, bark, leaves, gum, toddy, besides meat—all of which were freely eaten and kept the people going, but ruined their health. "People who looked not very unfit died off in a day or two," says Mr. Rendall. The point is that so long as they got this much food, unwholesome though it was, *they were not eligible for dole*; and as they would not go on works so long as they got it, they suffered. To include them, the dole would have had to be extended much beyond the emaciated and incapables contemplated by the Code. To have so extended it would, in the words of a competent local officer, have wrought "appalling demoralization."

Many more people would have gone on the works but for the want of a minimum, the delay in payment and the generally defective management owing to the want of an Executive Engineer and sufficient establishment,—*vide* the Commissioner's report of 27th February in Government Resolution No. 1656 of 20th March 1900. Probably if they had been sure of an anna paid daily (they did not ask for more) with the miscellaneous helps of the jungle, combined also with the village dole and extended poor-houses both of which began to be developed in this month, nothing more would have been possible for British subjects.

With regard to Broach I would refer to the general explanation submitted in my answer to Question 95, of the great mortality in Guzarat. This fully accords with the excess of deaths in Broach over Kaira and Ahmedabad, as the labouring classes are usually better fed in the first named district and therefore felt the shock of famine more.

In Kaira, if my figures (supplied by the Collector) are right, the numbers for January are very low and not improved so much as one would expect for February. The number of works in January was only one for each taluka, but the Collector reported that one or other was within 15 miles of every part of the district and that more were not needed. The low figures are accounted for (1) by the retention of piece work on most works until the middle or end of February, (2) by the refusal of the Dharalas to go to work till reduced to the last extremity. They formed three-eighths of the whole population and the poorer part of it, and (3) by the emigration of many from Borsad taluka into Broach district and from Kapadwanj and Matar to Ahmedabad. These people were attracted by previously existing ties of business and relationship as well as possibly by the task system which was introduced in both Ahmedabad and Broach earlier than in Kaira. (4) This district was much less overrun by immigrants than the other three, and last but by no means least in effect, a large part of it is peopled by the most substantial cultivators in Guzarat. The *patidars* of the "Cherotar" have large resources out of which they tided not only themselves but many dependants over the worst of the year. This was seen incidentally at the Neriad cattle camp, where no draught cattle were brought for maintenance and this is the only tract where milch cattle in any number have been preserved.

For the last week in March 1900—

District.	On relief works.		On gratuitous relief of all kinds.		Percentage of total on relief of all kinds to total population per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad	547,277	9·9	301,184	4·7	14·6
Kaira	421,708	8·7	161,751	2·6	11·3
Broach	438,570	21·4	142,013	5·9	27·3
Panch Mahals	138,605	7·4	41,011	1·9	9·3

The mortality for the month is—

	Per mille.
Ahmedabad	9·14
Kaira	11·91
Panch Mahals	18·69
Broach	14·05

The two highest places are again taken by the districts which gave the largest and the smallest proportion of relief.

The Panch Mahals continued to be especially exposed to floods of immigrants. Mr. Ryan mentions a little later having found 2,000 from Lunawada State in a single small town (Shera), and there is much other evidence to prove that many of the deaths were those of foreigners. I would again lay stress on the fact that in this district there was a supply of miscellaneous food in the villages until March, when it began to fail and was not reinforced by a good *mowra* crop as was hoped. The mischief was that the food was unwholesome. In Broach the immigrant trouble was also acute, and the population of both districts being comparatively small the percentages were swelled.

For last week in April.

District.	On relief works.		On gratuitous relief of all kinds.		Percentage of total on relief of all kinds to total population per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad	785,925	14·2	320,568	5·0	19·2
Kaira	499,999	9·6	158,469	2·6	12·2
Broach	399,792	19·5	132,302	5·5	25 0
Panch Mahals	239,843	12·8	72,911	3·3	16·1

These percentages continue to show that relief was not stinted in any district. The highest number on work in the Panch Mahals was 2,50,802,—higher than above—the number

having fallen in the last week of the month owing to cholera. In this month (before the cholera) competent officers in the Panch Mahals reported in their diaries that "arrivals on the Kalol Halol road work were nearly all strong and seem to have been faring well lately", that "toddy and *mowra* and hundreds of brab trees cut down for their pith were helping the people through", that "many picked up living by selling *timra* leaves and digging of roots". Mr. Ryan reported his workers to be "in generally good condition". The complaint was still made that payments on the work were not regular owing to the insufficient staff of the Public Works Department. After the Commissioner's visit on the 5th May they were supplied with schoolmasters as cashiers by shutting up as many schools as was necessary.

For last week of May.

District.	On relief works.		On gratuitous relief of all kinds.		Percentage of total on relief of all kinds to total population per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad	375,889	6·7	224,392	3 5	10·3
Kaira	360,351	6·9	194,470	3·2	10·1
Broach	280,824	13·7	83,848	3·5	17·2
Panch Mahals	145,512	7·8	102,525	4·7	12·5

This was specially the cholera month. The first districts to be attacked were Kaira and Panch Mahals, and the effect is shown in the percentages of gratuitous relief. To indicate the action taken I append extract from a report of Mr. Stewart's which will show that in all cases of desertion of a work, other works were provided near at hand, and as for the time the people would not go to them, dole was extended liberally. The percentage of gratuitous relief in the Panch Mahals rose from 3·3 in April to 4·7 in May and to 9·9 in June, similarly, in other districts, as shown by the percentages for the last week in June—

District.	On relief works.		On gratuitous relief of all kinds.		Percentage of total on relief of all kinds to total population per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad	506,352	9·2	265,754	5·7	14·9
Kaira	653,351	12·5	276,418	4·5	17·0
Broach	339,156	16·5	217,956	9·1	25·6
Panch Mahals	336,044	17·9	216,591	9·9	27·8

For July and August.

District.	On relief works.		On gratuitous relief of all kinds.		Percentage of total on relief of all kinds to total population. per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad.					
July	764,118	13·8	637,664	9·9	23·7
August	363,247	6·6	889,578	12·7	19·3
Kaira.					
July	932,689	17·8	719,014	11·7	29·5
August	192,481	3·7	644,964	10·6	14·3
Broach.					
July	333,612	16·3	543,670	22·7	39·0
August	152,076	7·4	472,395	19·8	27·2
Panch Mahals.					
July	338,697	18·0	412,431	18·8	36·8
August	221,336	11·8	586,620	26·7	38·5

The current in July was still to both the works and gratuitous relief as the rain held off and distress became intenser. In August it set away from the relief works to the village

where doles were freely given to all cultivators who were doing any *bonâ fide* work on the land and were without any means of subsistence.

For last week in September.

District.	On relief works.		On gratuitous relief of all kinds.		Percentage of total on relief of all kinds to total population per day.
	Total number during the week.	Percentage on population per day.	Total number during the week.	Percentage on population per day.	
Ahmedabad	95,778	1·7	506,213	7·8	9·5
Kaira	68,911	1·3	562,517	9·2	10·5
Broach	52,111	2·5	501,643	20·9	23·4
Panch Mahals . . .	22,771	1·2	357,984	16·3	17·5

Extract from the Panch Mahals Collector's No. 3609, dated $\frac{7th}{8th}$ *June 1900.*

2. Cholera broke out here at Kanelao Relief work, as reported in Government Resolution No. 2181 (Famine Department), dated 5th May 1900, and I need not amplify the letter of the Collector contained therein. On the 22nd April there were 12,235 relief workers on the tank and on the 23rd, 5,636, on the 24th, 5,625, on the 25th, 3,348, and on the next day the work virtually ceased, and Morwa and Ratanpur Tank Works were at once opened in order that Kanelao tank refugees might find work ready to hand.

In Government Resolution No. 2407 (Famine Department), dated 30th May, in a letter confuting the statements of Mr. F. C. Aldrich, it was explained that cholera began at Dohad Tank work on the 1st May, and on the 3rd May Captain Southey closed the work. As stated already in this Government Resolution arrangements were at once made for opening other works within 5 miles at Muwalia Tank and on the Dohad Ali Rajpur Road.

Another bad outbreak of cholera occurred at Jhalod, 20 miles north of Dohad in the heart of the Bhil country. On the 9th May 11,030 Bhils were on this work, and on the 11th May, 10,049, on the 12th, 9,235. The 13th was Sunday, and on the 14th there were 7,710 workers, on the 15th, 7,424, on the 16th, 7,225, and on the 17th, 6,009, on the 18th, 5,167; the numbers then began to rise again and on the 19th there were 5,701 workers, on the 21st, 6,411, and on the 22nd, 6,372. Since then the numbers have been steadily rising. These figures show that many people left the work, but how many have returned is indicated by the fact that the latest return for Jhalod Tank (5th June) shows a total of 10,574 daily workers. Thus, by the untiring effort of the local officers, a virulent outbreak of cholera was averted. It was bad, but not so bad as we might have expected after Kanelao and Dohad experiences.

3. There are nine relief works, on an average two in each taluka, open in this district. Cholera has attacked almost all of these but with the exception of Jhalod Tank, not one of these works has suffered from a cholera epidemic. There have been sporadic cases at several works, but they have been efficiently treated. On April 14—21 before the cholera appeared in this district, the average daily total number in this district of workers, in Panch Mahals, was 42,911, it fell to its lowest 23,634, in the week ending 19th May, but there was a steady tendency to increase from that date, culminating in the lowest total return of 36,333 for the whole district, and the figures are now rising daily. It may be said that we have lost 5,060 workers a day, on the basis of these figures. This is only half the truth. Cholera was at its worst from 22nd April till 15th May, and people took full advantage of the great liberality with which the dole was given to all refugees. Let me prove this by figures of people on the dole, and in poor-houses.

4. For the week ending April 16th, total number on the dole in this district was 1,246. Later weekly totals are as follows :—

April 23rd	5,513	April 30th . . .	6,250
May 7th	8,423	May 14th . . .	13,904
May 21st	32,025	May 28th . . .	49,938
June 4th	129,122		

These figures show more clearly than any arguments of mine could, that directly there were cholera refugees we put them on the dole. Between April 16th and April 23rd came cholera at Kanelao and we find a prompt increase of 4,250 on the dole. From May 7th—14th we get cholera at Dohad, and consequently a sudden jump in the dole list from 8,423 to 13,904. On May 14th cholera was at its worst at Jhalod, and in that very week we get the dole list not only doubled, but even half again as great, namely, rising from 13,904 to 32,025.

Note on the position at the beginning of the rains, 1900.

* 1. Ahmedabad.
2. Kaira.
3. Panch Mahals.
4. Broach.

Out of a total population (*4 districts) of 24,48,208 souls, there were by returns of 21st July—

On relief works	373,983
Dependants of workers	42,173
In poor-houses	16,856
Village dole or kitchen	227,828
	660,840

Recent rain has been ample for the sowing of the later *kharif* crops such as cotton, *juwar* and even rice. If it continues fairly through August and September there will be a good *kharif* and a good *rabi*. Also as much fodder as will be required.

Works under the Public Works Department for employment during the rains have been arranged for 97,354 souls. All possible shelter has been provided and dry rations to be given to dependants. Many will probably live in neighbouring villages. In the lighter soil districts it may be possible to provide more of these works, if the need appears. And some of the works already current may be prolonged until the rainfall gets very heavy. But in the black-soil tracts reliance must chiefly be placed on minor village jobs such as levelling uneven ground, strengthening tank bunds, etc. The small works now current (digging village tanks) will no longer be possible anywhere.

It is hoped that the great majority of workers will return to their villages. To provide these the following methods have been adopted :—

(1) To the poorest cultivators R18,00,000 allotted by the Central Relief Committee to the whole Division (including the three Political Agencies) and spent chiefly in (*a*) allowances for subsistence and seed averaging to R2 per adult for former and a lump sum of R5 for latter, (*b*) supply of chief grass (R2,00,000) and (*c*) supply of imported cattle (R2,00,000) on loan or at cheap rates.

(2) To those cultivators above the poorest and to those who from lack of funds or other reasons have failed to get help from the Relief Fund. Distribution of R39,14,000 allotted as *takavi* to the whole Division for (*a*) loans for subsistence and seed, (*b*) loans for purchase of fodder and (*c*) loans for purchase of cattle.

(3) Liberal distribution of village dole or food in kitchen—

(*a*) to needy dependants of the above if not otherwise provided for ;
(*b*) to all in immediate danger of starving ;
(*c*) to all who have no means of subsistence *provided* they are *bonâ fide* engaged in cultivating a piece of land or other agricultural operations such as tending cattle.

The following are maxims laid down for dole distribution :—(*a*) women and children to be treated at this time with special leniency ; (*b*) all in danger of starving to be put on dole or kitchen temporarily ; (*c*) able-bodied idlers to be struck off after a few days and told to go to work but their names to be retained on the list and marked for enquiry at subsequent inspections. They are not to be lost sight of. (*d*) Persons working for another to be assumed to have means of subsistence from their employer. Takavi is offered to larger landholders for the purpose of wages to labourers but not much has been taken with that expressed view. Kitchens instead of dole have been established in of the larger villages. Objections to them are the difficulty of finding shelter in most villages and of getting local men who can be trusted to supervise them. Another hitch is the caste feeling which I imagine is stronger in the Gujarat village than in most other parts of India. The patidars are as particular about themselves as Brahmins and they, as also many of the Rajputs and higher Colis, would rather die than be fed in a kitchen. Those who stop short of that hang back till they are emaciated. It has been ruled that persons physically unfit to walk to the kitchen and persons of respectable position or of high caste who for that reason refuse to go there are to continue to receive uncooked dole. Inspecting officers are to look after such and to take care that they do not starve.

For the distribution of *takavi* and charitable funds and for the supervision of village relief and watching the condition of the people generally the districts have been divided up into circles of varying size but averaging about 15 villages each under a Circle Inspector, and into larger areas averaging 30 or 40 each under a responsible officer. Every taluka is under a separate European or at least a Gazetted Officer. There are in all 53 extra Civil Gazetted officers under the Collectors of the four districts, nearly all of them Europeans. Some of them are in charge of a Taluka, some in charge of important relief works. The division of work varies somewhat at the discretion of the several Collectors.

Minor measures which may be noted :—Swiss milk and other light foods are distributed in large quantities in villages to the children through the Patel or other worthy man, being paid for out of the Central Relief and other Charitable Funds. It is ordered that people of *really* high class who refuse from a genuine sense of shame to accept dole may be granted small cash relief under the name of a loan. Hand culture in the absence of bullocks is encouraged by the offer of old tools on works that are about to be closed, and by the promise not to attach for assessment any crop grown by such means for food, which means really remission of assessment.

Inspecting officers are instructed to urge larger landholders who have not enough bullocks to cultivate all their land, to let plots to poor men for hand culture on the share system, and seed is to be given to the latter from the charitable fund, besides the claim to dole which will accrue. Orders are issued to the Circle Inspectors to take in hand through the Talati and Patel any local village improvement that may be available, and pay at the rate prescribed for small works.

Note on average incidence of assessments on outturn.

I regard any attempt at striking an average as misleading. Even the limited "crop experiments" organized by Government show such a wide range that a mean estimate has little practical bearing. This is still more true when we are considering the country at large. This is owing to unavoidable inequalities. A survey assessment made on inspection of the soil must be

affected by the idiosyncracy of the classer. No amount of care and skill can insure the correctness of an *á priori* estimate of the yielding power of field by field. Then again there are inequalities inseparable from agriculture, especially in this country. It is no uncommon thing to find a large fraction of an otherwise good crop destroyed by disease—*jowar* by smut, wheat by rust, cotton by boll-worm, almost everything by blight or by insects or by wild animals. Or the cultivator may lose all his profits by the death of his bullocks in an outbreak of rinderpest, or what not. These set-offs are very frequent—quite frequent enough to destroy the value of any general statement of the relation of outturn to rent. Then again the difference between the outturn of land of the same quality cultivated by a man of the Coli class and a man of the Patidar class is as much as 50 per cent. I am not arguing against the method of the Bombay system of classifying land. It is the only possible one, but it is of no use to ignore facts which should deter one from venturing too far as the strength of a generalization. All that can be said, and I do say it, is that cases of high assessment are rare and that, as a general rule, the Government share of the outturn of a fair year is, barring special accidents, less than 20 per cent. of the gross produce. Certain areas where this is alleged to be exceeded on the inferior kinds of land have been and still are the subject of enquiry by Government.

Note on Suspensions and Remissions of Land Revenue.

The maxim that the surplus of a good year must make up for the deficiency of a bad one, is open to the objection that it does not accord with facts. Whatever be our theory the vast majority of the cultivators will *not* save in a good year to make up for a bad one. A credit balance at the banker's is unknown to them. The indigenous method of collecting the land revenue is that of crop-share, an essential principle of which is no crop no rent, and a poor crop less rent. It is of course otherwise economically wrong because it bases rent on gross produce and therefore is hard on inferior land where the margin of profit is very small, but the former principle is adapted to the habits of the people and any system which loses sight of it is above their heads and must go wrong. I would certainly not advocate applying it to the variations of ordinary years, but in a year when the ground yields practically nothing the State is ultimately the gainer by accepting it. Rent *everywhere* is emphatically a share of the crop. If there is no crop a demand on even the best class of cultivators to pay it out of savings comes perilously near to a tax on capital, and on what in India most of all needs nursing agricultural capital. A case in point was mentioned to me by Mr. Mead. The Patel of Motera is one of the best of a class which ranks amongst the most substantial in Gujarat—the Daskroi patidars. Being known and much respected by all officials he was let off lightly by the Collector last year. And he saved 12 head of cattle, including some milch buffaloes, by the expenditure of Rs. 900 on fodder. He would certainly have been classed by the Talati and Mamlatdar, but for the special intervention of the Collector as "well-to-do, that is to say possessed of sufficient means to be able to pay without undue difficulty." (*Vide* Government Resolution No. 98 Famine of the 9th January 1897 and paragraph 5 of Government Resolution No. 8345 of 22nd November 1899.) It would as certainly have been held that he could "pay out of resources other than those needed for the efficient resumption of agricultural operations." (*Vide* explanatory order in paragraph 4 of Government Resolution No. 1965 of 7th April 1900.) If he could not scarcely any one could for he is one of the leading cultivators of the district, and milch buffaloes could not strictly be called necessary for the resumption of agricultural operations. Yet there can be little doubt that if pressed he would have paid out of the Rs. 700 he spent on his cattle.

2. I do not suggest that the maxim—"no crop no rent"—should be absolutely adopted. But I do submit that in a year when nothing is got out of the ground, the general rule should be immediate suspension of all demand on *bonâ fide* agriculturists. A few exceptional cases may be allowed; but at a time like that all the agricultural capital in the country is needed, and will be more fructuous to the State itself in the pockets of the ryots than in the State Treasury. Non-agriculturists should of course be coerced in every case. They have bought or otherwise secured land as a commercial speculation, and should pay for it just as they would pay for a yard of cloth.

3. On the above grounds it is even more important to release at once the agriculturists of means than those who have nothing. The Thakor of Limri, a Kathiawar Chief who owns many villages in the Ahmedabad District on Talukdari tenure, is said to have remitted all land revenue in the famine year even from those well able to pay and even on lands growing irrigated crops.

4. All fear being removed from the people by a declaration of suspension, it appears to me that total remission to all the poorest should closely follow. Out of 392,172 holdings in this division 1,98,671* are under 5 acres. Mere suspension will do no ultimate good to the holders of such. It goes without saying that they (in the four distressed districts) have been reduced to the last extreme. They have only escaped with their lives. As a class they have lost all their cattle. As a matter of fact they are likely to become day-labourers. Some of these may lift their heads up—cultivate by hand or perhaps get a bullock somehow,—and try to recover their position. It surely will not be advisable to levy from them double assessment in the next year. Other easily applied tests for remission are suggested besides smallness of holding, such as entire or partial loss of cattle. One test that most District Officers unite in deprecating is that of individual enquiry into every cultivator's means and estimate of his ensuing year's crop field by field. The former must at the best be inquisitorial. The latter to be accurate must be done with conscientious care and special knowledge and even so is not infallible. A crop of fair seeming jowar

The actual holdings under 5 acres are still more numerous owing to the sub-division of recognized holdings.

or cotton will sometimes turn out to the close observer to be half-gone with disease. Toor, a common crop, flowers twice, and this year it is only flowering once—a fact which may escape notice though it means nearly 50 per cent. less outturn. Again a fair crop on the ground may have been got after three successive sowings, the first two having failed. Thus even in good hands individual enquiry is likely to be fruitful in mistakes. All practical men view with alarm any system which entrusts the initiative in such enquiry to village accountants who are neither careful, honest nor acquainted with agriculture. It is notorious that the entries in village records are mostly made by them sitting in the village Chowra, and no orders that they are only to be made after personal inspection will have much effect. It is also notorious that these men have already an enormous amount of petty power in their villages which they use to make small illicit gains and to gratify personal spite. One of our most experienced and careful Collectors wrote the other day that for every Rs. 10 advanced as *takavi* 8 annas went into the pocket of the village accountant, and that in some cases *mukhis* had been found to take 8 annas from every recipient of Rs. 2 charity money, though payment of the latter had been made by a European in person. It is futile to trust to supervision and testing. The fact that the initial reports and entries are made by these men is enough to convince the simple villagers that every thing turns on their word and that they must be conciliated. To a large extent this is absolutely true, for many of the crops are cleared off before the inspecting officer can get round.

5. There is no possible alternative which will accurately define every man's power to pay. We cannot attempt to do more than follow broad lines. The village accountant in the ordinary course of duty enters in his "Pahani Patrak" the name of the crop in each field. The Mamlatdar should supply the figure of average outturn of every description of crop per village. This will leave exceptional cases on both sides of the line which the village and taluka officials should be held responsible for reporting, but they will not be numerous. When as sometimes happens there is great variation in the same description of crop it can generally be met by a simple division in the "Pahani Patrak" such as into early sown and late sown.

6. If the above is true, it seems to follow that not only suspensions but also remissions should be declared quickly, at the beginning of the year, as soon as events have declared themselves. The advantages of definite and early orders instead of keeping an indefinite demand hanging over the heads of the people are, (1) they would hearten the people assuring them of the sympathy of Government and perhaps in some cases, strengthening their credit; (2) they would summarily check the power, which no one can prevent their exercising so long as the question is open, of subordinates to press whom they please and spare whom they please; (3) they would clench a hold on those exceptional persons whom it was decided to make pay. These are generally the very men who take advantage of a vague situation to shirk their liability. So long as definite orders are delayed it rests very much with the village and Taluka Officials to say who shall and who shall not be pressed (not at all the same thing as issuing notices) and their tendency is to dun the submissive and to spare the influential and contumacious.

7. It should be laid down that no suspension should be recovered in the next year unless there is a twelve anna crop and not more than half the suspended assessment on a holding unless there is an average (16 anna) crop. Without a rule of this sort a suspension is of no ultimate use and may just as well not be allowed. For out of a bad year a *ryot* always emerges with increased debt and with reduced means. He looks to the next year to recover himself all round. If, as too often happens, he still gets but a moderate crop he has to pay out of it what he lost in the previous year—subsistence money, perhaps the cost of replacing a dead bullock and so on— and if on the top of all he has to pay double assessment his break-down is hastened.

8. Some provision should be made to avoid an accumulation of suspensions. No more than one year's assessment of a man's holding should be debited to him at any one time over and above that of the current year. Any more that cannot be collected at once should be remitted. Or no suspension should be allowed to stand against a man for more than two clear years.

9. When the crop of the year is poor but not a failure the course is not so clear. A survey occupant can pay his whole assessment out of an 8 anna crop once in a way. But a succession of 8 anna crops may break a man as certainly as one total failure. Cases should be dealt with as they arise in a liberal spirit. In an 8 anna year all agricultural and domestic expenses go on nearly the same as ever, so there is little margin for him. A 4 anna crop would justify a total suspension.

Famine Orphans.

Early in July 1899 Rao Bahadur Arcot Narainswamy Mudliar of Bangalore offered to receive and maintain 40 to 50 Hindu orphans in his orphanage at Bangalore, and Government referred the request to the Collectors of affected districts with a request that in the event of there being any orphans of the classes referred to whom they thought it would be desirable to send to the orphanage in question, they would communicate with the Resident of Mysore.

Similarly in respect of the offer of the Srinivasa Mandiram orphanage to receive a dozen Hindu orphans (G. R. No. 3194, dated 25th August 1900).

4/6

The action taken by the Commissioner and the orders issued from time to time regarding orphan are as follows :—

A register of abandoned or neglected children was ordered to be kept in all districts in a form prescribed, *vide* Commissioner's circular embodied in the preamble of Government Resolution No. 74, dated 5th January 1900, appended.

On the 20th February 1900, the Commissioner having seen a post card from one Mr. S. N. MacCann of Anklesar, expressing his desire to take some orphans whom he had heard were in the Godhra Poor-house, wrote to the Reverend Mr. Frease of the American Methodist Mission, laying down the conditions upon which Government officers would only be justified in handing over the custody of children to Missions. One of the conditions was that there should be a promise on behalf of the Mission to restore any children that may be given at the end of the famine to their lawful guardians, if claimed by them. Copies of this letter were sent to each of the five Gujarat Collectors for information and compliance and a copy was also sent to other Missions.

On the 26th March 1900 the Collector of Broach was given explicit instructions regarding disposals of orphans and deserted children—copy of Commissioner's No. 3314, dated 26th March 1900, appended. On the 23rd July 1900 Government in reviewing the report on progress of relief measures in Sholapur observed in paragraph 3 of their Resolution :—

"Great care should be taken not to send children to orphanages, especially if loss of caste is involved, so long as there is room for doubt whether they are orphans. Some who are for the time being deserted may be claimed when the famine is over, and in the meantime their maintenance is a legitimate State Charge."

In continuation of this order Government Resolution No. 3071, dated 10th August 1900, was passed (as a result of the conference held between their Excellencies the Viceroy and Governor in Ahmedabad). Copy of Government Resolution appended.

The activity of Pandita Ramabai in the collection and deportation to Poona of orphans and deserted children was not brought to notice. But in September 1900 (Commissioner's No. 11615, dated 29th September) the lady was addressed on the subject. Copy of letter appended. The lists received from her have been recently circulated to all Heads of Districts with the Commissioner's No. 15020, dated 20th December, in order that if any children are in the Pandita's orphanage who are enquired after, they can be restored to their people.

To frustrate the action of some people who were removing orphans from the distressed districts of Gujarat to distant parts of India, the Assistant Superintendent of Railway Police was addressed on the 5th September 1900. He was asked to give orders to his Police to stop any children who were apparently of the class referred to at any railway station in Ahmedabad, Kaira, Panch Mahals, Broach and Surat, unless they were accompanied by a written permission from the Collector. It was added "that permission will not at present be given except for the transport of children to some place within Gujarat such as Bulsar, Anklesar, Surat, Nadiad, Ahmedabad, where there are recognized orphanages". Copy of this letter was sent to each Collector for information and guidance.

Subsequently on the 15th October the Collector of Ahmedabad was addressed on the subject of the collection of children by one Mr. Mandly Bird who is believed to be connected with a Mission labouring in Southern India. Copy of No. 12460, dated 15th October, appended.

The Collector reported that Mr. Handly Bird was authorized to take children on the terms given in his No. F.-5786, dated 16th September 1900. The Collector, however, on the 18th October issued orders to all Missionaries who had been given orphans or had been authorized to get orphans from poor-houses in supersession of all previous orders, that they were not at liberty *at any time* to remove them permanently from Gujarat without special permission from the Collector.

To the above a special reply was, at the instance of this Office, called for by the Collector from Mr. Handly Bird by way of promise to act up to the order. This Mr. Bird did on the 31st October 1900 in the following words :—

"Handly Bird begs to acknowledge the receipt of the above-mentioned memorandum superseding all previous orders and will act accordingly.

HANDLY BIRD."

Shahi Bagh.

Since then it is understood the orphans have been removed by Mr. Bird to either Bulsar or Tithal, but we have no official information of this.

F. S. P. LELY,

Commissioner, Northern Division.

The 3rd February 1901.

Extract from the Proceedings of the Government of Bombay, Famine Department, No. 74, dated Bombay Castle, the 5th January 1900.

READ—

Memorandum from the Commissioner, Northern Division, No. 6538, dated 26th December 1899—Submitting the following circular No. 6537, dated 26th December 1899 :—

"In the Bombay Presidency Famine Report of 1896-97, paragraph 24, it is said that 'there are no accounts of abandoned or neglected children.' The Collector of Kaira brings

to notice that he has already found 7 or 8 such, and suggests that a careful record should be kept of them. The Commissioner would add that a special attempt ought also to be made to protect them as well as orphans who are in a sense children of the State. It is said, with how much truth he cannot say, that many persons are on the look out for female children to bring them up for an immoral life. It is the duty of the Government officers, as far as may be, to secure that both orphans and entirely deserted children are committed to some institution or trustworthy private persons by whom they will be honestly brought up. A form containing the following details has been drawn up by Mr. Quin :—

Register of deserted children. *Taluka.*

Name (if ascertainable).	Sex.	Age.	Caste.	Father's name and occupation (if ascertainable).	Whether orphan or not.	Where resident.	Where found.	How disposed of.	REMARKS.
1	2	3	4	5	6	7	8	9	10

NOTE.—In the column headed "Orphans or not" the word "Orphan" should be entered against the names of all children, both of whose parents are dead,

with this order—'The Collector desires that a record should be kept of all cases of children under 12 years old who have been deserted by their parents during the famine, and also of orphans under 12 who have been deserted by all their relations. This record should be kept for each taluka by the Mamlatdar, and all officers of whatever grade are requested to supply information regarding cases which come to their notice to the Mamlatdar of the taluka in which the deserted child is found. The Mamlatdar should keep a register in the appended form, and an abstract from it should be submitted monthly to the Collector through the Sub-Divisional Officer.'

"A similar course is commended to all Collectors"

RESOLUTION.—The course adopted in the Kaira District should be followed in all the other affected districts.

A.

No. 1902, dated Camp Dohad, the 22nd February 1900.

Demi-official from—The Honourable Mr. F. S. P. LELY, Esq., I.C.S., Commissioner, Northern Division,

To—The Reverend Mr. E F. FREASE.

I HAVE seen a post card written by Mr. S. N. MacCann of Ankleshwar, who belongs, I believe, to your Mission. He had heard that there were many orphans in the poor-house at Godhra and wrote to say ... he would take them. I do not think any Government officer would be justified in handing over the custody of children on such a requisition as this. I would gladly see your mission take over as many as possible, but there is nothing to show that Mr. MacCann is an Agent of the Mission or that he undertakes more than an individual responsibility and that too of the vaguest kind. If anything should happen to Mr. MacCann next year, what guarantee have we about the children? The point becomes more important when we remember that many of the orphans are girls and that others besides missionaries have applied.

2. If you wish for the care of orphans, I gladly welcome your philanthropic help. But we ought to proceed regularly, I think that you or whoever may be an accredited representative of your Mission should apply in writing to such Collectors as you may wish, promising on behalf of the Mission (1) to restore any children that may be given you at the end of the famine to their lawful guardians if claimed by them, (2) otherwise to give them a decent start in life and meanwhile to feed, clothe and educate them suitably. The number you are prepared to take should also be roughly stated and the locality where you propose to keep them, not to bind you down to anything, but for the Collector's information.

3. The Collector will of course not confine himself neces-arily to Missionary Societies. But he will satisfy himself in every case of the respectability of the applicant, of his responsibility and of his means to make permanent provision for the proper bringing up of the children.

B.

No. 3314, dated Camp Surat, the 26th March 1900.

From—The Honourable Mr. F. S. P. LELY, Esq., I.C.S., Commissioner, Northern Division,

To—G. D. PANSE, Esq., Collector of Broach.

WITH reference to the disposal of orphans and deserted children who may be on the hands of Government, I understand that you wish for explicit instructions.

2. You inform me that Mr. Oomar Jamal and Mr. Chabildas are both of them prepared to receive children, but you do not say whether they are prepared to care for them and bring them up until they can get their own living. To consent to keep them for only 6 or 12 months will clearly not meet the difficulty of orphans. Such offers are ment for deserted children only who may be claimed after the famine is over. You will incur a serious responsibility by sending orphans for they will be returned on your hands or on the hands of Government.

3. The Mahipatram Anathasram has also taken in a large number of children. It is a most excellent institution. I can scarcely be accused of any feeling against it, having subscribed personally to its funds more than most Hindu gentlemen. But there are already nearly 1,000 children in it and there is not only the danger of overcrowding, but there is no sufficient security that all these little ones will be brought up and either married (in case of girls) or taught to earn their own living (as boys). It is impossible to send *all* the orphans there.

4. As nearly all the children are Hindus or quasi-Hindus (Bhils, etc.) they should be given over to Hindu gentlemen if they supported a sufficient number of institutions which could give a guarantee for bringing all up healthily and decently. But they do not. Far from it. Consequently we must in this dire calamity accept the help of all philanthrophic persons without regard to religious belief. I understand from you that the Presbyterian Mission through its Agent, Mr. Blair has applied, but has not yet been favourably received. I am surprised at this as there can be no question that a stable institution which guarantees complete bringing up is in many respects preferable to a gentleman, however generous, who merely undertakes to provide maintenance for 6 or 12 months. I request that you will be good enough to meet all unobjectionable offers in turn including that of Mr. Blair and not to keep the children as a charge on Government longer than can be helped.

C.

No. 3071, dated Bombay Castle, the 10th August 1900.

RESOLUTION—By the Government of Bombay, Famine Department.

IN continuation of the instruction contained in paragraph 3 of Government Resolution No. 2897, dated 23rd July 1900, His Excellency the Governor in Council is pleased to direct that in all cases in which children are sent to orphanages by Government servants it should be stipulated that in the event of their being hereafter claimed by parents or near relatives they will be restored to them, and that they should not be sent to orphanages located at a greater distance than 50 miles from the place where they are found and should by preference be sent to orphanages within the district.

D.

No. 11615, dated Ahmedabad, the 29th September 1900.

From—F. S. P. LELY, Esq., I.C.S., Commissioner, Northern Division,

To—PANDITA RAMABAI, Poona.

I UNDERSTAND that you have collected under your care no less than 1,600 destitute Gujarathi girls whom you propose to bring up as natives of the Mahratta country.

2. I entirely sympathize with your philanthropic motives and in the early part of the year you may remember that I assisted your agents, but it has come upon me as a surprise to hear of such an enormous deportation of girls from their native country. The objections to it are obvious.

3. In the first place it is altogether inadvisable to keep such a huge number in one establishment. The most perfect organization cannot prevent it from being a risk.

4. Secondly, it is quite certain that many of them are not orphans at all. They have parents or near relations who should not be deprived of their rights because they were unable in time of famine to keep the children.

5. Thirdly, it is not right to denationalize so many children, and take them away from the province to which they belong and bring them up in a country where the customs and the language are strange. There are further obvious objections when they are all of one sex.

6. One thing I am bound to insist on even at this late state and it is that all children claimed by *bonâ fide* parents or relations must be restored to them. For that purpose I request the favour of your informing me if you can send me a full list of the children's names, age, caste, village, relations' names and any other particulars which may aid in their identification.

Please reply early, and also kindly state in what locality your orphanage is at present situated.

E.

No. 15020, dated Camp Harsole, the 20th December 1900.

Memo. by the Commissioner, Northern Division.

THE Commissioner, Northern Division, presents compliments and has the honour herewith to circulate to the undermentioned officers *in succession* two lists of destitute girls taken from Guzarat by Pandita Ramabai to her institution at Poona during the famine of 1899-1900 :—

Collector of Ahmedabad.
Collector of Kaira.
Political Superintendent, Palanpur.
Political Agent, Mahi Kantha.
Collector of Panch Mahals.
Collector of Broach.
Collector of Surat.

2. It is possible that many of the girls are neither orphans or widows. With this object principally in view the Commissioner has obtained from the Pandita and is now circulating the two lists hereto annexed in order that they may be consulted if any parents, husbands or near relations make enquiries about the girls.

3. Each officer mentioned in paragraph 1 is requested to take immediately on receipt of the lists extracts of such of the entries made therein as appear to him to appertain to his district and to be so good as to forward them on to the officer next mentioned with the least possible delay, taking care that they are not detained in his office. The last named officer will please return the papers for record in this office.

F.

No. 12460, dated Ahmedabad, the 15th October 1900.

From—F. S. P. LELY, Esq., I.C.S., Commissioner, Northern Division,

To—The Collector of Ahmedabad.

I HAVE the honour to invite your attention to the desire of Government that no orphans shall be removed out of Gujarat so long as there are institutions within the province able and willing to take them in. I refer to the subject having come to know that the Agent of Mr. Handley Bird has been taking away children from Prantji, although a gentleman on the spot, Mr. Stevenson, is ready to take them in and bring them up among their own people. He professes to be acting on a general permit from you. Now he makes no secret that he does not intend to establish an orphanage in Gujrat, but hopes to be allowed to take them away into Southern India when the famine is over. I, on the other hand, have taken more than one opportunity of telling him plainly that he will not be allowed to do anything of the kind.

2. With regard to orphans, some people (who generally do nothing themselves) try to raise the question of religion. It is specially gratuitous to do so in the case of Bhils who are neither Christian nor Hindu. I think we should ignore religion altogether and simply consider if applicants whether Hindu or non-Hindu can guarantee a decent bringing up in the children's own country at the least expense to Government. Then Mr. Stevenson offers to bring up all his boys in the Prantij Taluka and he should certainly get all we can give him.

G.

No. F.-5786, dated Ahmedabad, the 16th September 1900.

Memo. from—M. C. GIBB, Esq., Collector of Ahmedabad,

To—REVEREND HANDLEY BIRD, Shahibaug, Ahmedabad.

The Reverend Handley Bird, Missionary, Shahibang, has been kind enough to offer to take and provide for destitute children left orphaned or deserted by their parents during the famine

2. At the suggestion of the Commissioner, Northern Division, the Collector has the honour to ask him to be good enough to give an undertaking in writing that—

(1) the children are to be taken and cared for on behalf of his Mission so that in the event of his dying or leaving his present post or place of residence the care of the children will be transferred to his successor;

(2) in the event of lawful guardian of any child applying for the custody of such child after the famine, he will on satisfactory proof of lawful guardianship make over such child to such lawful guardian;

(3) all children retained by him will be suitably fed, clothed and, as far as possible, educated, and started in life when of suitable age;

(4) he will not remove the children from Ahmedabad District before six months from 1st September 1900.

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3. The Collector shall also be obliged if Reverend Bird would kindly inform him the number of children he now has, the additional number he is prepared to take, the locality where he proposes to keep the children and the Mission he represents.

4. On submission of the undertaking above referred to the Collector authorizes him to take children from anywhere in the Ahmedabad District including Hathising Wadi Poorhouse.

Position and functions of a Commissioner.

The position of the Commissioner was not altogether well defined.

Under section 29 of the Famine Code, he is to have the chief executive control of, and be responsible for, the direction of famine relief under the orders of Government. In the month of January, however, the Chief Secretary was sent through the Division to inspect relief operations and to confer directly with the Collectors. The Commissioner was informed demi-officially that he did not come as Famine Commissioner, but as a matter of fact he was generally regarded as a Famine Commissioner, and was so termed by the public, both in talk and in print. His suggestions were adopted by Government, without being first communicated to the Commissioner, and the Collectors were called on to carry them out and report. In one case the whole relief work system of a district (Broach) was reorganized upon his report without any consultation with the Commissioner.

In June a similar tour was made, but it was confined to a review of the situation.

The first at least of these tours could not but weaken the sense of responsibility in the Local Commissioner. It may have been advisable. I simply note the fact.

Some points on which the Commissioner was overruled :—

(1) Appointment of women released from plague examination work to care of children and exhausted adults in some of the worst poorhouses. The Commissioner was specially impressed with the need of this at Dohad. (This poorhouse was afterwards visited and described in coloured language by Dr. Klopsch and others in the public press.) There was no one to be trusted to feed the wasted children. Half-moribund new-comers were left to lie all day on the floor, because they happened to come just after morning meal. The Commissioner took a Mrs. Wilkinson, whose service at the Dohad Railway Station as a Plague Examiner was just terminating, and placed her in charge. Her pay was R100 per month, not excessive for such work. Government did not approve of his action and cancelled it.

(2) The Commissioner proposed in his No. 2299, dated 2nd March 1900, that wages to the people of the Panch Mahals should be reduced, but that a minimum should be fixed of one anna per day. Government accepted his proposal, but reduced the minimum to 9 pies. The sum of three pies is trifling, but it was a reduction of 25 per cent. and in the Commissioner's opinion it made all the difference between probable success and probable failure. One anna was what the people themselves asked for. It was a round sum per day, the offer of which, when it became known over the country-side, would have attracted many to the works who would not come for less.

(3) The method of fining for short work suggested by the Commissioner was disallowed by Government in Government Resolution No. 2080 of 23rd April 1900, but these orders were modified after correspondence with the Government of India.

(4) The Resolution of Government to draft all workers in Broach District from the North to the South of the Narbadda, under penalty of a reduced wage, was passed without any communication with the Commissioner who submitted his views afterwards as per preamble of Government Resolution No. 1251 of 3rd March 1900.

(5) In Government Resolution No. 2058 of 19th April 1900, the Commissioner incurred the disapproval of Government for pressing his view that on the whole the relief works in Ahmedabad and Kaira ought to be made attractive by being at an easy distance from the homes of all the people, and that the real danger was not so much that too many would come on as that too many would keep off.

(6) Government at the beginning of the year declined to accept the Commissioner's estimate of the amount of land revenue it would be necessary to suspend.

(7) Government declined to accept a proposal by the Commissioner to extend the period within which persons might relinquish their lands which they could not cultivate. It was thought by the local officers that it would enable the people to throw off at once a burden they could not bear and so raise their spirits.

(8) They also disapproved his proposal to grant immediate remission of land revenue in certain areas on certain well defined tests, such as the total or partial loss of all cattle. Government letter No. P.-1972 of 20th September 1900.

Mr. HARI LAL DESAIBHAI DESAI, PLEADER.

The President.—On what point have you come to speak?

A.—On the question of orphans.

Mr. Nicholson.—Did you yourself have any Institution?

A.—I was a visitor in the orphanage at Ahmedabad.

Q.—How many orphans were maintained there?

A.—About 500.

Q.—Is that orphanage maintained by the municipality?

A.—It was opened in August 1900 at Government expense.

Q.—What was the nature of the experience you had during the famine?

A.—From December 1899 orphans were collected by several bodies, missionary agencies and others, and several of them were taken out of Guzerát.

Q.—How were they collected?

A.—They were collected from the fields, or streets in towns and villages, fro m wherever they were found.

Q.—Missionaries and other bodies exercised their charity in picking up waifs and strays?

A.—Yes; my point is that under section 201 of the Code the orphans were to be supported by Government up to the end of the famine; and at the end of the famine inquiries should be made to find out the parents and relatives of the children. Failing the discovery of protectors, the question of disposal would come, but the question should not come at the beginning of the famine.

Q.—If I remember right, a circular was issued by the Commissioner in January 1900 as regards the disposal of orphans, by which registers were established showing the various places from and to which orphans were taken?

A.—As far as I know, the orphans went out of Guzerát, and there is no record as to where the children went.

Q.—Are you sure of that?

A.—So far as my experience goes I can say no record was kept.

Q.—Were these deserted children?

A.—Several of them may have been.

Q.—Was there an admission register kept?

A.—Yes.

Q.—Were these children that were sent away, sent with a descriptive roll?

A.—No.

Q.—When a child was sent away was it struck off the roll?

A.—The manner in which they were taken away was such that there was no opportunity of making any note as to which child went away.

Q.—Did you object to this?

A.—Yes.

Q.—When?

A.—On the 13th of September. I objected to 162 children being taken away without any particulars being left.

Q.—I presume a note was made showing that such and such a child was taken away by so and so in the nominal registers of the Institution?

A.—Not at the time: a note was perhaps made afterwards by taking the roll of those who were left. I found that out by inquiry from the Superintendent.

Q.—You speak from personal knowledge as regards this orphanage only?

A.—Yes; I have seen children taken away.

Q.—You don't know under what conditions they were taken away?

A.—No.

Q.—You confine your personal knowledge to this particular orphanage?

A.—Yes.

Q.—Would the register show where the 162 boys and girls had gone?

A.—It would not show it exactly: it would be simply inferential.

Q.—Would the register not contain the nominal roll: if any one goes and takes a particular child would not the particulars be shown?

A.—No; the Reverend Mr. King came to select certain children; he was in a hurry and so the Superintendent was left to find out who was taken.

Q.—I presume the visiting Committee were consulted?

A.—No.

Q.—By whose orders was this permitted?

A.—Mr. King had the Collector's authority.

Q.—You are aware that a circular was issued by the Commissioner requiring that a register should be kept of orphans and that they should not be taken out of the Provinces without express orders?

A.—Yes.

Q.—Do you mean that the orders were disobeyed ?

A.—Not quite that, but the orders came a bit late, and before that children had been given away for whom there was no register.

Q.—Had no orders been issued early ?

A.—I only know of the orders issued in October.

Q.—They were issued much earlier. Do you mean that notwithstanding these orders the children were taken away ? Can you say where the 162 children now are by a reference to the register ?

A.—Perhaps they are with Mr. King. I have to add this as regards the children, that there was no undertaking that their religion or caste would not be interfered with : there should have been such a condition.

Q.—Did he enter into a bond of any sort ?

A.—He only signed a letter that he would keep the children until a claimant should come forward.

Q.—Is it not in the Commissioner's circular that their religion and caste should not be interfered with ?

A.—I know that the children with Mr. King are being given non-Hindoo food twice a week ; this is from inquiries which are as good as my own knowledge. My point is that a record should be kept of where a particular child has gone and that information should be notified in the villages, so that the parents may have an opportunity of claiming their children, and that a six months' period should run after the time of the issue of the notification.

Q.—Do you agree with these (North-Western Provinces Code Rules shown) ?

A.—Yes ; I think so.

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Harilal Desaibhai Desai.

Replies by Harilal Desaibhai Desai to questions drawn up by the Famine Commissson.

Question 104 (*a*).—"How were the orphans disposed of at the end of the famine? Were they made over to friends, caste people, native institutions or missionaries?"

Answer.—The disposal of orphans was begun long before the end of the famine. In Ahmedabad and Kaira scores of children were summarily given away to missionaries from poor-houses, relief camp kitchens and similar places while the famine was raging. Before doing so, no attempts seem to have been made to trace their parents, friends or caste people as contemplated in paragraph 201 of the Famine Code. Deserted children and orphans were now and then sent to the Mahipatram Orphanage at Ahmedabad. But a great number of them was given away during the course of the famine to missionaries to be removed out of their respective districts; and several of them have been actually drafted away to Pandita Ramabai's Institution at Poona and to similar missionary institutions as far as Madras. These children have been practically placed outside the reach of their surviving parents, friends or caste people; and no central record seems to have been kept of those thus transferred during the famine to enable their friends to trace them. The general undertaking taken from the missionaries by the District Officers while allowing them to take away the children is practically valueless to their surviving parents or friends:—

(*a*) In the absence of there being a central record showing their name, age, caste, village, taluka, and the names of parents, relations or friends;

(*b*) Without the same information being publicly notified at the end of the famine through village officers in the respective villages.

(*c*) Without supplying all the necessary facilities to the poor survivors to reach the place where their children have been drafted away and to obtain them without expense and annoyance.

For instance a children's poor-house was opened by Government at Hathising's Wadi in Ahmedabad in August last. I was one of the non-official visitors. In the month of September several children desired to be sent away to their parents or relations. It was consequently suggested that such of them as were healthy and could give the names of their relations and villages should be duly sent away. But in the meantime Reverend King from Sanand came up to the Institution with a

letter of authority from the Collector; and he selected and took away 162 boys and girls on the 13th of September 1900 without leaving any list of those thus removed. Some of the non-official visitors suggested that in the first instance efforts should be made to send the children to their relations, particularly as they so desired it and were averse to being taken away by the missionaries. But, again, on the 18th of September Reverend Park was authorised to take away 206 children from the Institution to Nadiad; and he also left only a receipt showing the aggregate number of the children taken by him. After this, one Thakarda Amra Ganesh came up to the Institution seeking his son Devla. After some enquiries by the visitors it was found that the boy had been taken away by Reverend Park to Nadiad. One of the visitors requested the Collector to issue orders to enable the man to get his son. The reply returned was, "The man has been told he can go to Nadiad if he chooses and satisfy Reverend Park the child is his". As the man was penniless, a private gentleman gave a rupee for his railway fare; and he got his son from the reverend gentleman after much annoyance. Under the circumstances, it is difficult for the surviving parents or friends of the children thus disposed of to know in the first instance where a particular child is and even after knowing it to possess the means to reach the place.

The giving away of children to missionaries while the famine was going on and their removal to distant places has given colour to the impression of the public, that poor-houses and relief camp kitchens, etc., are being availed of as centres to facilitate proselytism without the Government intending it.

THE HONOURABLE J. W. P. MUIR-MACKENZIE, CHIEF SECRETARY TO THE GOVERNMENT OF BOMBAY.

The President.—In the third clause of the synopsis of our instructions, 7th paragraph, it is stated that the Commission should enquire and report "in what manner relief by means of *tacávi* or other advances of public money and by means of the suspension or remission of the land assessment has been applied in the different provinces to their special needs; whether the existing machinery for the prompt institution of these forms of relief is adequate; and whether any general instructions are called for with regard to the principles or methods by which such relief should be determined." It is also said that "the Commission will not be precluded from recording any recommendations or opinions which it is thought may be of use either in anticipation or in the treatment of future famines."

In order to enable us to fulfil that injunction it is necessary that we should have a brief statement of what the Bombay Land Revenue system is, and what the organization is, by which the Government is informed as to the imminence of famine and as to the condition of the agricultural community in general. I propose to put a few questions to you to bring out these points and then we shall be very glad to hear any statement you would like to make.

I understand that the foundation of the Land Revenue system is to be found in the joint note of 1840 and the joint report of 1847, with which the names of Captain Wingate and Mr. Goldsmith are so intimately connected; and I understand that the principles which these documents enunciate are still accepted as forming the basis of your Land Revenue system.

A.—Yes.

Q.—The unit of assessment is, I understand, the field which the joint reports define as "the extent of land capable of being cultivated by a pair of bullocks." Upon that field an assessment was placed, such that it could always be paid, taking good years with bad. That assessment, I understand, has been somewhat varied since its first imposition; but is equivalent at the present time to a very small percentage of the value of the gross produce. We have had it in evidence to-day that in the Násik district the percentage is on the whole, taking a liberal margin, not more than 8 per cent., while we have been told by another native witness, on the basis and estimate of crop produce, that it was something like 4 or 5 per cent. The Commission have asked for more precise figures, but may I assume that it is on the whole correct to say that the Land Revenue does not take up a larger share of the gross produce in the Bombay Presidency than 5 or 6 per cent.?

A.—I think, Sir, that taking the higher assessments of Gujrát into consideration it would be safer to say between seven and eight per cent.

Q.—Leaving Gujrát on one side and taking the other portion of the province, it will be less?

A.—It will be less. The assessment in Gujrát, I think, is a fifth of the gross produce.

Q.—One-fifth of the gross produce?

A.—I should say 20 per cent. in the four districts—Ahmedabad, Kaira, Broach and Surat.

Q.—But in the remainder of the Province the assessments would fall under six per cent.?

A.—Certainly under six per cent.

Q.—The title, I understand, which the owner of a Survey field was given is a very strong title. Subject to the payment of the assessment, he was, I quote from Captain Wingate's report, made "absolutely free from all conditions." I understand that he could mortgage or sell the field as he pleased; but that he could not subdivide it?

A.—He could subdivide it. But until lately the subdivisions were not shown in the map except at the time of settlement.

Q.—He cannot dispose of the subdivision?

A.—Oh, yes, he can lease or mortgage any subdivision or any part of his field he pleases, and considerable numbers of such transactions have taken place.

Q.—Is that a subsequent departure from the principles of the joint report?

A.—I never understood it to be so.

Q.—I understand from the joint report that if the *rayat* wishes to contract his cultivation he must relinquish the entire field?

A.—Oh, no, Sir. The survey number is the basis of the unit of assessment, but any amount of subdivision may take place. Until recently, until the introduction of the land record system, the subdivision remained entirely unmarked in the map until the revision of the settlement when the subdivision of what were termed clubbed occupancies formed an important part of the operations. A clubbed occupancy means a survey number comprising more than one occupancy.

Q.—May I take it that the field cultivated by a pair of bullocks would be about 10 acres?

A.—It varies very much. A great deal of respect was also had to the original holding of the *rayat*.

Q.—Would it be correct to say that the survey number is on the average about 10 acres?

A.—I should not like to say definitely what is the average size of the field.

Q.—Well, having conferred on the cultivator such a strong title in the land at a low rent, I understand that it was then the policy of the Bombay Government at the time to leave the *rayat* pretty much to himself?

A.—That is so.

Q.—In fact in the letter of the Bombay Government of the 22nd September 1848, which endorses the principle of the joint report, I find a statement to the effect that the object of the Government was "to exempt the cultivators from the surveillance of Government officials, to incite them to independence and to create agricultural capital." That was the policy of the Bombay Government at the time. The result was that there was no particular connection between the Revenue Department and the cultivators of the soil, owing to the enforcement of that policy, until more modern times?

A.—Not any connection with their credit transactions certainly.

Q.—Am I correct in stating that it was not at that time considered necessary to provide for any greater elasticity in the collection of the rent or the revenue than was given by the liberty to the cultivator of contracting his cultivation?

A.—If I remember right, Sir, there is a paragraph in the joint report showing that the necessity of granting remissions had always been contemplated. It is in Appendix No. 1. It is a report of Messrs. Goldsmith and Wingate of the 17th October 1840.

Q.—In my question I refer to paragraph 44, and I would draw your attention to the great importance which was attached to this power of relief. You see they state in paragraph 44 that "the contraction and the extention of the area of the cultivators' holding is of immense importance when the cultivators' capital is small and liable to great fluctuations from varying seasons?

A.—Yes, Sir.

Q.—Beyond the power of contracting this cultivation, it was not the intention or the policy of the administration of that time to assist the cultivator in any way? In fact, in Captain Wingate's own words, it was considered an "obvious advantage to get land out of the hands of cultivators unable to pay their way and to transfer it to cultivators with capital" (paragraph 16 of the note). That is the general effect of it?

A.—I beg to direct your attention to paragraphs 23, 24, 25 in the Report of 1840. He says that in districts where our settlements are introduced, variations in the annual demand are limited to two, *viz.*:—

I. An increase or diminution of land in cultivation.

II. Remissions on account of failure of crops, or poverty of *rayats*.

The first is essential to our system, and we hold it to be one of the greatest advantages, &c. The second must, we apprehend, be to a greater or less extent attendant upon any settlement in India, where seasons are so very uncertain, and general failures of the harvest by no means infrequent. Under the new settlements here, remissions have already become quite inconsiderable, and we have reason for believing that in a few years more, as the circumstances of the cultivators improve, they ought in ordinary seasons to be little more than nominal.

The above extract shows that the authors of the joint report clearly contemplated the possibility of remissions in extraordinary seasons of drought, and occasionally even in other seasons.

Q.—Captain Wingate's object was the creation of a substantial body of men who would bring to the cultivation of the land that amount of agricultural capital which the poorer cultivators do not possess. That was the policy which was laid down. Well, I submit for your acceptance, Mr. Muir-Makenzie, the proposition that an improvident tenantry suddenly gifted with a most valuable property at a very low rate of rent, after the manner of improvident tenantry all the world over, commenced to borrow on it; and that they found in the money-lenders a keen-witted body very glad to make advances of money on these terms. Gradually the cultivators became, to a very large extent, indebted beyond redemption and their holdings passed to their creditors?

A.—I believe so. There is one remark I should like to make, that is with reference to the class of people who lend money. It has been several times brought out in reports on the subject of agricultural indebtedness and in, among others, the report of the Commission of inquiry into the Deccan Agriculturists' Relief Act, that many of the leanders are cultivators of means, who deliberately follow out the policy of adding field to field, and that the quantity of land passing to such lenders is in excess of the quantity passing to mere money-lenders. In this manner it is possible that, in the very manner foreseen by the authors of the joint report, there is a certain class of substantial yeomanry growing up, possessed of capital.

Q.—That is very gratifying to hear; but I think there is also room for believing that the substantial cultivator, whom the authors of the joint report contemplated as coming forward, did not often come forward; that practically there were no other cultivators than those who already held the fields and that when they became indebted and were sold out, the persons who stepped into their places were very frequently their creditors who were the money-lending classes.

A.—Yes, Sir, undoubtedly.

Q.—Am I justified in thinking that owing to this policy of leaving the cultivator very much to his own devices, no provision was in the early days made for the system of village records such as we find in Northern India and such as I understand the Bombay Government is now introducing?

A.—Certainly there was no such elaboration in the early, or even in the existing, records as in those of Northern India or which are now to be introduced.

Q.—As I understand, the system in the early days was confined to the maintenance of a register of the owners of the fields and that these registers were not written up in accordance with all the mutations and changes which happened from time to time. There was no annual correction of the record, and after a series of years-records became difficult to reconcile with existing circumstances?

A.—The registers were sufficient for revenue purposes.

Q.—For revenue purposes only ?

A.—For revenue purposes.

Q.—The omission to record the mutations was not felt, because the revenue was light and was always paid by the *sáukár*. But the system of records maintained was not such as to keep the Government informed of those agrarian matters which are considered essential if the Government is to be kept in actual touch with the cultivators of the soil ?

A.—The Government could not certainly derive *full* information. The omission to record the mutations was not felt because the revenue was paid without demur.

Q.—That was the state of affairs from the date of the joint report of 1847 up till the Deccan Rayats Commission. Things went on and the cultivators got indebted, and this state of things attracted in time the attention of the Government. The Deccan Rayats' Commission, having enquired into the matter, found reason to take exception to the revenue policy of the Bombay Government in some respects, and they pointed out that however low the revenue assessment might be, yet in certain adverse seasons the small *rayat* was not able to pay it, and that in such cases the alternatives before him were either to borrow or to relinquish the land. That was the alternative which was put by the Deccan Rayats' Commission as emerging from the circumstances which they found ?

A.—I do not remember the exact words.

Q.—Does it not commend itself to your general knowledge, as a fair description of the circumstances of the case, that although the assessment was low, still in adverse seasons the *rayat* had either to borrow to pay the Government revenue or he had to relinquish the land ?

A.—Very frequently this was so, no doubt.

Q.—Well, the result was that the Deccan Rayats' Commission recommended "a more elastic system on fixed principles, avoiding haphazard remission." But that view came into collision with the old-established theory that variations in the season were already taken into account inasmuch as the revenue was fixed at a very low rate, so that the *rayat* could pay in a good year or a bad year. The Bombay Government was not prepared at that time to re-open the discussion ; and nothing at that time was done in the way of creating the organization to bring the Bombay Government into a more close acquaintance with the condition of the agriculturists ?

A.—There were, perhaps, other reasons for not introducing a system of remissions. I believe such a system over unirrigated lands is scarcely known in India. Such a system of general remission.

Q.—I am dealing now with the question of your organization ?

A.—I thought you alluded, Sir, to what the Commission recommended.

Q.—The Deccan Rayats' Commission recommended that elasticity in the Government revenue could not be enforced unless Government had a record of the individual field and its agrarian relations from time to time ?

A.—Such was, I dare say, the case.

Q.—The question of the elasticity in the collection of the Government revenue came, however, before succes-ive Governments of Bombay, and, as far as I can see from the papers, it was specially considered in connection with the first draft of the Famine Code which was prepared after General Strachey's Commission in 1880.

A.—Yes.

Q.—The result of the consideration of the question by the Bombay Government was that rules were adopted under which suspension of revenues were allowed in cases of "*total or almost total destruction of crops over a considerable area.*" That was the point which the Bombay Government had arrived at after considering the reports both of the Deccan Rayats' Commission and of General Strachey's Commission. Subsequently the Deccan Rayats' Commission of 1891 again examined the question ; and they, too, urged that the rigidity of collection which they found then existing should be modified ; and they represented that the power of suspension referred to above had been too sparingly exercised, and that it was desirable to go a little further to give relief, not merely in the case of total crop-failure, but also in the case of severe vicissitudes of season. That was their suggestion ; but the Government of Bombay did not concur in that view ; they said that it would unsettle rural society and sacrifice the lessons of prudence ; and they also maintained that the capitalists, who by this time had come largely into the possession of land and who held it at a very low rent, would derive an unfair advantage and benefit unnecessarily ?

A.—Yes.

Q.—So that, summing up our conversation, I may take it as correct that from the date of the joint report of 1847 till the discussion which followed the first Deccan Rayats' Commission of 1876 and the report of the Famine Commission of 1880, the question of elasticity in the collection of the revenue was not discussed ?

A.—I am not aware of any discussion.

Q.—In any case no such discussion followed at that time has led to any modification of the Bombay system ?

A.—Not so far as I am aware of.

Q.—Then between 188) and 1891, many discussions did follow ; and since 1891 the matter received still further attention as I understand, and your system of land records has been from time to time modified ?

A.—Yes, Sir, our system of land record inspection has been modified ; and we began before that.

Q.—Before that, but active measures were taken from 1891 ?

A.—No, Sir. The first thing we introduced was the system of Circle Inspectors.

Mr. Bourdillon.—When was that ?

A.—That was before 1891. Perhaps in 1885. I cannot pledge myself to the exact date.

The President.—Let us just briefly consider what the modifications are, which have been introduced after the discussion referred to. When the joint report was issued and up to 1880 your system was that of the village *Patel ?*

A.—Of the village *patel.*

Q.—The village *patel* was engaged in the collection of the revenue ? Was he engaged in recording any agricultural statistics ?

A.—Yes, Sir, and there was the *kulkarni.* I cannot say the exact dates, but they were engaged in recording the various crops and the estimated yield of the crops ; though the record in the village of the yield of the crops was subsequently abandoned.

Q.—Then afterwards you introduced an additional agency which comes under the agricultural department ?

A.—Yes. The Circle Inspectors.

Q.—Of how many villages were the Circle Inspectors in charge ?

A.—30 to 40.

Q.—What was the duty of the Circle Inspectors ?

A.—His principal duty was to look after the maintenance of the field boundaries and the crop inspection.

Q.—You have a system of boundary pillars about every field in Bombay ?

A.—Mounds, cairns and stones, rather than pillars.

Q.—His business was to look after that and after the crop ; was it any part of his duty to record mutations of land ?

A.—No.

Q.—So that the land might pass out of the hands of the actual cultivator without the Government being any the wiser ?

A.—Yes, Sir.

Q.—Were the *kulkarnis* subordinate to him ? Was he the Inspecting Officer ?

A.—Yes, Sir.

Q.—He examined the papers and took from the papers the information he required ?

A.—Yes.

Q.—Over the Circle Inspector whom had you ?

A.—We had first of all the *mamlatdár.* The Circle Inspector was over the *kulkarni* and under the *mamlatár.*

Q.—I am now talking of your land records ?

A.—I think it is necessary to specify that the *mamlatdár* was responsible for these matters.

Q.—Does the Mámlatdár get any information from the *patel* or the *kulkarni* ?

A.—Not on these matters ordinarily direct from the *patel* and *kulkarni.* He will in ordinary course receive the information from the Circle Inspectors who get their information from the village officers and their records.

Q.—On what matters does he get information?

A.—Revenue collection and a variety of miscellaneous matters.

Q.—Then you have two streams of information, one regarding collection of revenue, the other regarding statistical facts ?

A.—Yes.

Q.—Who was the next officer ?

A.—Over the Circle Inspectors there was also, that is besides the *mamlatdár,* an officer for the whole district called the District Inspector. He compiles the current returns of the district at headquarters.

Q.—He also compiles the agricultural statistics for the district ?

A.—Yes.

Q.—That is your scheme, that is the existing scheme of land records ?

A.—I should mention, Sir, that Circle Inspectors have many functions in connection with famine.

Q.—What is your intelligence department in the time of scarcity ?

A.—The village officials are bound to report crop failure and the Circle Inspector goes to the spot.

Q.—Are they under obligation to report all crop failures ?

A.—They are.

Q.—Failures of what magnitude ?

A.—No matter what the magnitude. But the failure must of course be appreciable.

Q.—If there was a loss of 4 annas in the crop, would that be considered appreciable ?

A.—In every year I do not think a special report would be made of a 4-anna failure, certainly not field by field, but the Circle Inspector would give the *mamlatdár* the information he required.

Q.—Well, say that information reaches the *mamlatdár* that there has been a hail-storm and that an appreciable proportion of the crops in a particular village has been destroyed. Is it a part of the Circle Inspector's duty to go and report on it ?

A.—Yes.

Q.—And having verified the fact he sends on his report. Have you got any system of suspension of revenue?

A.—Not in ordinary years. In years of failure there is the system already described.

Q.—Now that is what I am coming to. You know in Northern India there is a system of graduated suspension of revenue in cases of crop failure, whether from hail or any other cause. The matter is reported and action is taken. The action taken varies in different provinces. In the Central Provinces there is a very ingenious arithmetical system; elsewhere it is not so precise. The result is that the order goes down to suspend the revenue in a particular area. Now you have no such rule as that here?

A.—No, Sir.

Q.—May I ask you whether the Bombay Government is considering any question on that matter?

A.—No, Sir, they are not considering any such question.

Q.—Having regard to the vicissitudes that the province has passed through, do you feel at liberty to say whether a system of suspension of revenue is desirable apart from circumstances of absolute crop failure?

A.—Apart from circumstances of absolute crop failure I should certainly say it is undesirable.

Q.—May I ask you what your reasons are?

A.—Because I consider from the past history of the districts that there is no need for it.

Q.—Do you say that with reference to Gujrát?

A.—With the exception of a very few tracts in which unforeseen deterioration of the soil has taken place I should say certainly, and in regard to richer portions of the country I should say so with special emphasis. If it were anywhere required, it would be in regard to the worst lands where the smallest share of produce is taken as revenue.

Q.—You would say this in regard to that portion of the Presidency in which the rent takes a very small proportion of the gross produce?

A.—There are tracts in these districts for which in some years no assessment can be too low in relation to the crop. But, on the other hand, in other years they have an infinitesimal proportion of the produce to pay.

Q.—In regard to tracts of the country which are so precarious you still say that no general system of suspensions is necessary?

A.—I still do, Sir, because I think the *rayat* has no difficulty in paying; the assessment is so very low.

Q.—Do you find that the *rayats* save in good years?

A.—I do not think they do very much, Sir.

Q.—Well, if you are not prepared to assist the *rayat* by means of suspension, would you be prepared to assist him by means of *tagi* advances on a very large scale?

A.—Yes, Sir. But I should like to see first the results of the very large advances given of late years.

Q.—Do you think that your Intelligence Department, if I may so call it, is sufficiently strong in the province to keep you fully advised of crop failure?

A.—Yes, Sir, I mean for famine purposes.

Q.—You think that the co-ordination of the various authorities is sufficient to give the information?

A.—Yes, Sir.

Q.—Now how are transfers recorded? How can you get correct information as to the persons responsible for the Government revenue?

A.—In the case of the death of a registered occupant the name of his heir is recorded without any application. Other transfers are only registered on the application of the parties. Registered occupants keep their name in the register in the hope of some day regaining possession.

Q.—In such a case is the registered occupant responsible for the revenue?

A.—As long as his name is on the register he is liable. But the revenue is collected from the man in possession.

Q.—But how can you tell who is in possession?

A.—This is ascertained by enquiry in the villages.

Q.—I understand that when an arrear is due the *mamlatdár* or the *patel* distrains the property of the registered occupant!

A.—Yes.

Q.—So that a man may have sold his right and may be merely a sub-tenant on a rack-rent, yet because his name was registered a long time beforehand the *mamlatdár* attaches his property?

A.—In theory this may possibly be done; but it never happens.

Q.—Well, that may or may not be. What I want to get at is this, that under your system of land record you have no record of the person who is really responsible for the Government revenue?

A.—No, Sir. That is to say the revenue record may contain no entry of the man from whom, in many instances, the revenue is actually recovered. The registered occupant whose name is recorded is by law the person responsible for the revenue in the first instance. But the revenue is also recoverable in his default from co-occupants, co-sharers, and other persons interested in the land, including mortgagees with possession, who are included in the definition of "holders" of land laid down in the Revenue Code.

Q.—The man whose name is in your record may be dead or may be only the rack-rented tenant of the real owner: you come down and attach the property of a person who is merely a rack-rented tenant?

A.—It never happens. I can safely say that. The records in many cases do not represent the actual possession of the land; but such a case as you put never happens.

Q.—You must rely upon the discretion and the good judgment of your *mamlatdár*.

A.—No. We rely on the arrangements between the tenant and his rack-renter. The latter comes forward and pays, otherwise the tenant, who is the registered occupant, might relinquish the land, or the land would be forfeited.

Q.—One other question I will put to you. I gather that you are not in favour of suspension of revenue unless in the case of entire crop failure? Are you in favour of uniform suspensions over large tracts of country, or are you in favour of enquiring into the circumstances of each individual as to whether he can pay or not?

A.—I am in favour of enquiring into the circumstances of the individual. The experience of the 1896-97 famine confirms me in the view I hold.

Q.—That was not always the view of the Bombay Government. I came across this morning a statement of that Government to the effect that enquiry into the circumstances of the individual leads to obvious abuses. The second Deccan Rayats' Commisssion had suggested that suspensions should be granted with regard to the *rayats'* inability to pay; and the Bombay Government in the 21st paragraph of their letter No. 1477, of March 8th 1893, considered that such a procedure would lead to obvious abuses. That seems to me to be forcible; because if in the case of a large crop failure or a famine, you would have to enquire into circumstances of each individual, before suspending the demand. You lose time: and you place yourself in the hands of your subordinates, your *patels* and *kulkarnis;* and they will let off the people who give them a little fee?

A.—That is not my experience.

Q.—We have seen it stated that if the *kharíf* instalment of the revenue falls due and after notice is not paid, the occupant becomes liable for the revenue of the whole year, including the *rabí* instalment, which is not due?

A.—I should not like to answer the question off-hand, but I do not think that this is the case.

The following remarks were subsequently communicated by the witness:—

The answer to the last question but one requires a good deal of amplification. Since my examination I have referred to the letter No. 1477, dated the 8th March 1893, and I cannot at all admit that the 21st paragraph is in any way inconsistent with the policy as regards suspensions which I respectfully support, and which, as I understand it, is accepted by the Government of Bombay. The remarks quoted by the President are carefully qualified by the preliminary observation that they refer merely to "bad years" that are not notified as famine years. The Government deprecate a system under which minute personal inquiries into individual circumstances would be required whenever there was a bad year. They do not say that they would dispense with such inquiries in a year of famine. On the contrary I should gather that they were prepared to undertake the inquiries, notwithstanding the drawbacks to them whenever in their discretion the suspensions appear necessary. They supported the levy of the assessments from such persons as would be able, notwithstanding the loss of crop, to pay the light assessments from previous accumulations. This is exactly the policy for which, as I understand it, the Local Government still contends. And it is a policy which in 1896-97 throughout the famine-stricken arear, and in the present famine throughout the Deccan, has been successful. How far in Gujrát it has not succeeded has yet to be shown. That it has resulted in the exercise of pressure upon any person unable to pay has not been proved. But the resistance to payment, I believe, on the part of persons well able to pay, has been far greater in Gujrát than we have ever known it in the Deccan, and the resistance of last year seems to be likely to be followed this year by resistance to the recovery of even the current demand, not to mention arrears of suspended revenue. This year plenty of people have had good crops, and the continuance of resistance proves clearly that the people will not hesitate to resist payment who have ample resources. It may be mentioned that in recent investigations into the amounts of land which had passed into the possession of the money-lending classes it was found that in the district of Broach about 28 per cent. of the land had so passed. Now in that district we succeeded last year in collecting no more than 19 per cent. of the revenue. Thus we obtained far less than in all probability the non-agriculturist possessors of the land ought to have been able to pay. In this district at least there can be little doubt that the benefit of the leniency of Government has been reaped by members of the non-cultivating classes who were well able to pay the assessment, and the chief objection which is entertained to a policy of indiscriminate leniency is that so much of the benefit goes to these classes without corresponding relief to the cultivating classes who are in thraldom under the money-lender.

With reference to my answer to the last question I find that under section 148 of the Land Revenue Code if an occupant fail to pay the amount due at an instalment he *does* become liable to recovery of the whole of the land revenue due upon the holding. The provision, as a matter of fact, is rarely if ever enforced, and would no doubt be enforced only as a penalty for contumacy on the part of an occupant well able to pay.

REVEREND MR. L. S. GATES, MISSIONARY, SHOLAPUR.

The President.—Has your mission been long established in Sholapur?

A.—Yes, it was established in 1862.

Q.—Were you in Sholapur in 1897?

A.—I came at the latter part of 1897.

Q.—Can you compare the famine of 1897 with that of 1900?

A.—The last one was far more severe.

Q.—On what part of the famine relief measures do you desire to be examined. Would you desire to be examined regarding relief given on relief works or in regard to gratuitous relief distribution?

A.—I am willing to speak as far as I know on any subject. I have had very little to do with the actual working of the camps, but I have visited them frequently.

Q.—What was the first manifestation which seemed to you to indicate the approach of famine?

A.—Numbers of people came asking for work.

Q.—Came to your mission?

A.—Not only there, but wherever they heard there was work. There was the Hotgi tank, numbers collected there before there was work for them.

Q.—In what month was that?

A.—It was in February or March 1900, perhaps earlier.

Q.—Was there no work provided for them?

A.—Before work was opened, I think, 3,000 people had collected from various parts of the country.

Q.—Why did they come there?

A.—They heard Government was to open work there.

Q.—Was it a rumour which induced them to come?

A.—It was well known that there was to be a tank made there, but the staff was not ready to take over so many people.

Q.—Did the unreadiness consist in the absence of sufficient establishment or want of tools and plant, or both?

A.—I think both.

Q.—Were these people who collected in a state of destitution?

A.—Yes.

Q.—Did they remain there long before the work was open?

A.—I questioned them and found they had been there from 15 to 20 days.

Q.—Sitting in expectation of work being opened?

A.—Yes.

Q.—And was there any sort of arrangement made for the distribution of gratuitous relief pending the opening of the work?

A.—There was not, as far as I could learn.

Q.—Might it not have been possible with the exercise of a little resourcefulness to have put them into gangs, looking after the sanitation, &c., in anticipation of the getting together of tools and plant?

A.—I don't know.

Q.—Did the mission undertake to make any arrangements?

A.—Not there at Hotgi.

Q.—Who was the Civil Officer in charge?

A.—Mr. Kilka, a Mahratta.

Q.—Is there any Government organization there?

A.—It is a little village only 10 miles from Sholapur city. They are making a tank there.

Q.—Then did the Public Works open a tank there?

A.—Yes, it is being made now.

Q.—Was there any delay once the Public Works Department commenced in setting the people into gangs and providing tools and plant?

A.—No, they did it as fast as they could.

Q.—Was there much mortality pending the opening of the tank work?

A.—Not at first; afterwards there was.

Q.—Was there a hospital establishment there?

A.—Yes.

Q.—Were the hospital arrangements quite adequate?

A.—Yes, I should think so.

Q.—How many native doctors or hospital assistants were there?

A.—Only one.

Q.—For how many thousands?

A.—The numbers varied from 2,000 to 15,000.

Q.—Am I to understand that the numbers reached a maximum of 15,000 and that there was only one Hospital Assistant?

A.—I understand there was one and he had an Assistant.

Q.—Was there no more responsible person in charge of the medical arrangements than a Hospital Assistant?

A.—I think the principal man was a Hospital Assistant.

Q.—Can you give me a very brief idea of what was done. How was the organization of a crowd of people into an orderly working body effected?

A.—They had *karkuns* who put down their names; as fast as there was work for them they were put on.

Q.—That is they registered applicants for work?

A.—Yes.

Q.—Was there any delay in registering applicants for work?

A.—People said some had to wait a long time before their names were registered. Word was sent round that they would only register them on certain days in the week.

Q.—You could not say that it was true?

A.—No.

Q.—When the whole thing got into full swing and the names had been registered, did you visit the works?

A.—Yes.

Q.—Did the organization of the establishment seem to you to go on satisfactorily?

A.—Yes.

Q.—People had to perform a certain task, and whether they performed it or not they were entitled to the minimum wage. Did it come to your notice that the people were lazy and idle and were content to get the minimum wage and do no more?

A.—I found a good deal of human nature among them.

Q.—And how did it manifest itself there?

A.—Some were lazy and did not get enough to live upon, so they left the work and went about the country begging.

Q.—Did some exert themselves?

A.—Some were obliged to. We had a Christian Committee there and when we found that the people were not willing to work we said we would not help them.

Q.—They preferred to go about wandering; what became of them?

A.—Some of them, I am sorry to say, got so weak that they died, some, returned to works.

Q.—Were poorhouses established to pick up waifs and strays?

A.—Yes.

Q.—A Government organization or missionary?

A.—We had a poorhouse but did not take in very many; some destitute widows and persons of that sort. There was a Government poorhouse at Sholapur.

Q.—Were these kitchens on the work?

A.—Yes.

Q.—Could these wanderers come to kitchens and get fed?

A.—Yes.

Q.—In regard to the distribution of food in villages, did you make any enquiries?

A.—As far as I could: I have mission agents in many of the villages.

Q.—Did you find that the dispensing of relief in the villages was altogether controlled by official agency or was non-official agency associated with it?

A.—There was some non-official agency.

Q.—Would you advocate for the future the employment of non-official agency in the distribution of food?

A.—I should employ it as far as possible if you could get trustworthy agents.

Q.—Could more trustworthy agents be employed than were?

A.—I think so. For instance when the famine opened I wrote to the Government officers telling them that I could recommend certain persons as being trustworthy who had been on mission work and I was satisfied that they could do the work.

Q.—Were these men employed?

A.—Very few, and many whom I could not recommend, were taken on.

Q.—Do you think these persons had been recommended by clerks and inferior officials as friends of their own?

A.—I have a suspicion that they gave one or two rupees to get the position.

Q.—They gave this money and I suppose took steps to recoup themselves and it could only be done at the expense of Government?

A.—Yes, as far as my experience goes, this bribery goes through the whole Hindu society. I don't blame the Government officers, they did their best, it is impossible to stop it.

Q.—Was the distribution of doles in the villages adequate to the necessities of the case, or was it greater than it should have been or less?

A.—Yes, as far as I know it was just about what it should have been.

Q.—I ask the question from two points of view—first from the point of view of the number of people to receive it. Do you think everybody in actual need of relief received it?

A.—I think they did.

Q.—Was the dole sufficient in quantity to enable them to live?

A.—I think it was.

Q.—So that from both points of view you consider the distribution of relief in the villages that you saw was satisfactory?

A.—I think it was unsatisfactory in one point. There was a distribution of clothing and sometimes of grain to persons who did not need it; that was noticed by my mission agent in some cases. In Sholapur city clothing was being distributed and so long as the Collector was on the spot it was given to the needy; as soon as he went away wealthy persons came forward and received it. That is to say so long as responsible European supervision was present the distribution was correctly made; but when it was withdrawn it fell off.

Q.—That could be remedied I suppose by having a stronger European staff?

A.—Yes.

Q.—Also by the employment of a more responsible native staff?

A.—I think it could, especially if these natives are from other places and there is no temptation to use favouritism.

Q.—On works did you hear complaints of the system by which payments were made and fines inflicted?

A.—I have not heard any complaints except from the lazy.

Q.—What was the nature of their complaints?

A.—They said they didn't get enough. On enquiry I found they had not been on works for a long while.

Q.—Did they make any complaints regarding the measurement of their works?

A.—I heard no complaints of that kind.

Q.—Do you think the Government system of works was well chosen or did it occur to you that money could have been better spent in smaller works scattered over the villages?

A.—I think that a good deal of the money was at first non-productively spent; for instance a great many of the country roads were repaired by taking up a little dirt from the side and putting it into the middle of the road. The first showers of rain will wash that away.

Q.—Do you think that money might have been better spent if it had been spent in digging tanks in the various villages?

A.—It seems to me that it could be. I have often talked with Government officers about damming up the rivers.

Q.—Do you think such labour would give the relief that was wanted and would be useful for the future?

A.—Yes, and it would also be useful to store up the water in the valleys.

Q.—Do you think that one result of bringing large number of people away from their villages and concentrating them on public works has relaxed ties of family life which prevail when they are at home? Have you had any practical examples of a man divorcing his wife on account of anything that has happened on works?

A.—I have not seen that.

Q.—Is there any particular point upon which from your experience you think that the past could have been improved upon?

A.—There are two points, one is that steps should be taken that when people need works the work should be ready for them, and the second, that more responsible persons should oversee the works, if possible.

Mr. Nicholson.—Were Public Works officers actually engaged in marking out the tank when these 3,000 people were staying there?

A.—Mr. Kilka was making a survey.

Q.—Did the people belong to the neighbouring villages or distant villages?

A.—Some were from the neighbouring villages; others from distant villages.

Q.—How did those who came from distant villages maintain themselves?

A.—They had cooking utensils which they sold, or a bullock or horse; they also sold their clothing.

Q.—What was the wage actually earned by them?

A.—It would be Re. 0-2-0 for a strong man. I should think, more than half earned the full wage.

Q.—Did you notice any liquor shops near the work?

A.—I do not remember. I saw dancing women as regular attendants on works. They were hanging about camps.

Q.—Did you see anything of the operations for the relief of weavers?

A.—Personally I had not much to do with it; nearly one-third are weavers in Sholapur city.

Q.—Were they maintained by means of their craft?

A.—Yes.

Q.—With what success?

A.—I think with very good success. People were saved from distress and at the same time the outturn of work was satisfactory.

Q.—These people have not the physical capacity for breaking stones, have they?

A.—I think they have. I have a plot of 18 acres and my plan is to take those who could not go to relief camps, who needed some one at home, such as widows with children to look after. I intended to supplement Government work. I did not take any who had been on Government work.

Q.—What work was this?

A.—Carrying earth and digging and breaking stone. I have broken Rs. 1,500 worth of metal for the municipality.

Q.—Was this done by the weaving class of people?

A.—Many were weavers.

Q.—These people would not ordinarily have gone to large relief camps?

A.—No.

Q.—They were hardly capable of working on task work?

A.—I think they had never done it before, besides they were not exposed to publicity on my work, and were quite willing to come to it.

Q.—You are well acquainted with the people. Do you know any colloquial terms in which they express the relief that has been offered?

A.—No, I have not heard any special terms.

Mr. Bourdillon.—You said more than half earned the full wage?

A.—I think it was just about that.

Q.—Did you hear complaints that the *moharrirs* took something from the wages?

A.—Yes.

Q.—It was a kind of *dusturi*. Can anything be done to stop that?

A.—It is very difficult.

Q.—How much did the people actually earn on your private work?

A.—The same scale as Government work. A man Re. 0-2-0, a woman Re. 0-1-6, a child from 10 to 15, Re. 0-1-0 and small children Rs. 0-0-6.

Q.—On what basis of grain rate was this calculated?

A.—I followed the famine Code. I intended to do nothing which would interfere with Government work. I admire the energy with which Government worked the famine.

Q.—Did the people do sufficient on your private work to earn Re. 0-2-0, &c.?

A.—Yes, we turned them off if they were lazy?

Mr. Bourdillon.—As you worked at the same rates as Government, you had a opportunity of seeing if the Government rate was sufficient?

A.—I treated my people a little better than Government, because I gave them clothing.

Q.—You are satisfied however that the rate was about correct?

A.—Yes.

RAO BAHÁDUR G. B. THAKUR, DISTRICT DEPUTY COLLECTOR OF SHOLAPUR.

The President.—Are you in charge of a sub-division?

A.—Yes.

Q.—How many *taluqas* are there in your sub-division?

A.—Three *taluqas.*

Q.—What are your duties?

A.—To try cases.

Q.—Do you collect revenue?

A.—Yes.

Q.—Were you engaged on relief business last year?

A.—According to the Code the Sub-Divisional Officer has to do certain duties and those I did.

Q.—What were those duties?

A.—Supervising the kitchens and the village dole system.

Q.—When the rains began to fail, Sub-Divisional Officers were deputed to make inquiries?

A.—I was not there at that time.

Q.—You had charge of village gratuitous relief?

A.—Yes; from December to June.

Q.—Who was your immediate subordinate in the distribution of gratuitous relief?

A.—The *mamlatdár.*

Q.—And under the *mamlatdár* you had other officials for the purpose of distributing gratuitous relief?

A.—We had Relief Head *karkuns* and Circle Inspectors.

Q.—Under them were the *patel* and *kulkarni?*

A.—Yes.

Q.—Did you strive to get up village *panchayets* for controlling relief?

A.—Attempts were made, but the people were not willing to act as members of a *panchayet.*

Q.—Are there not *panchayets* in every village?

A.—No, there is no such system.

Q.—Are there not certain people in the village to dispose of caste disputes?

A.—No.

Q.—Is it not the custom of the country, if there are caste and social disputes, to submit them to the arbitration of four or five men in the village?

A.—Not generally. People prefer to go to litigation.

Q.—Do you mean to tell me that in the case of ordinary caste disputes and social disputes the *panchayet* does not settle them?

A.—Very rarely.

Q.—They do it occasionally?

A.—Yes.

Q.—Who are the people who settle these social disputes?

A.—Old and respected people.

Q.—They have certain influence in the village?

A.—Yes.

Q.—They are cultivators in the village?

A.—Yes.

Q.—They may be *mahajans?*

A.—Yes.

Q.—Would it not be possible to get this *panchayet* together and say to them: "There are so many people here who are poor and distressed; we come forward for their relief, will you be responsible to see that they get that relief properly distributed"?

A.—I do not think so. That would be possible.

Q.—Why?

A.—They do not care.

Q.—You did not try the experiment?

A.—No.

Q.—Do you think it is possible to get together respectable people of a village to help you in a small matter like that?

A.—No; they would not come to the meetings.

Q.—Did you associate with yourselves native agency or non-official agency in this administration of village relief works?

A.—No.

Q.—Were any village tanks included in the village works?

A.—There was only one.

Q.—Is it possible to dig tanks in the villages with advantage?

A.—Yes.

Q.—Are there any respectable and leading people in the villages who would contribute towards the digging of the tanks of which they would have the sole use afterwards? Suppose a tank cost a thousand rupees. If Government consented to give two-thirds of that money, would the leading man of the village give the remaining one-third, if the sole use of that tank is given to him?

A.—Yes.

Q.—Was there anything like that done?

A.—Yes; in the case of *takávi* loans.

Q.—Is *takávi* used for that?

A.—Yes.

Q.—Some people take the whole amount from Government and some take a part of it?

A.—Yes.

Q.—How much money was advanced in that way?

A.—About Rs. 50,000.

Q.—Do you think that if a large amount like two or three lakhs of rupees is advanced people would be willing to take it on these terms?

A.—Yes.

Q.—There is a possibility of employing labour in this way?

A.—Yes.

Q.—Would the people themselves control the digging of these wells?

A.—Yes, that is one way; there is another way in which *takávi* might be advanced. The person taking *takávi* should be required to repay it in a certain number of instalments and instead of the person being made responsible I would have his land made responsible.

Q.—You mean that the *takávi* instalment should be recovered as an addition to the revenue assessment?

A.—Yes; as if it were a part of the assessment; and when the *takávi* was repaid the original assessment should be restored.

Q.—Do you think that on such a system there would be a large demand for agricultural *takávi*?

A.—I think so; it has not been tried yet, but if it is tried, I think there would be many applicants for it.

Q.—Do you think that there would be any chance in your *talugas* of people joining together for the purpose of advancing money at a cheaper rate; do you think there could be any thing like credit Associations among the people themselves?

A.—I do not know. It has never been tried and I cannot give a definite answer. But I do not think that people will consent to try the scheme.

Q.—What is your reason?

A.—In the first place the people are accustomed to individualism in matters of trade and commerce; there are more individual concerns than joint-stock companies. Every one prefers to act for himself.

Q.—Have you heard of *takávi* or any other advance being made on the joint and several responsibility of people acting together and not on the responsibility of an individual?

A.—No.

Q.—If Government wanted to give a *takávi* loan of Rs. 2,000 to a particular village for the improvement of that village; would 20 or 30 of the more substantial people in the village join together and become jointly and severally responsible for the payment of that loan? Do you think that such an arrangement would find favour with the village?

A.—No; I do not think so.

Q.—What is your reason?

A.—Every one thinks that he can do better with his own money himself than by putting it into a joint-stock company.

Q.—I am not talking of the joint-stock company. I am asking whether if the tenants of the village would collectively borrow money from Government as *takávi*, what security would Government have?

A.—The property of everybody would be the only security. As far my experience goes, I should say that the people are not advanced enough to adopt the system of agricultural banks.

Q.—Had you any control over the public relief works?

A.—No; practically none.

Q.—Had you any control over poorhouses?

A.—Yes; and over kitchens attached to the public works.

Q.—I understand that grain doles were distributed in villages and that the kitchen became practically a poorhouse?

A.—Yes; practically. The difference was that in the kitchens the majority were children and in the poorhouse the majority were adults.

Q.—Do you not consider it would be better to give grain doles to the people and let them remain in their houses?

A.—It was thought that people who were not in real need were coming for the dole.

Q.—Could not they have been excluded by associating with yourselves the village agency to find out their circumstances?

A.—I do not think so.

Q.—These people were content to go to the poorhouses and get cooked food?

A.—Some of them.

Q.—What proportion ?

A.—Fifteen per cent. Most of them preferred to remain in their villages.

Q.—To take relief in their villages ?

A.—Yes.

Q.—Was there much sickness in your district ?

A.—No ; except cholera.

Mr. Bourdillon.—How would an advance of *takâvi* under your system be given ?

A.—Enquiry would be made into the circumstances of the applicant, and after getting sufficient security money would be advanced.

Q.—How would it be repaid ?

A.—In ten instalments.

Q.—Half-yearly ?

A.—Yes ; payment should be fixed so as to coincide with the two main harvests.

Mr. T. E. PITRE, SECRETARY, SHOLAPUR MUNICIPALITY.

Mr. Nicholson.—You have prepared a note for the Commission?

A.—Yes.

Q.—It bears entirely upon the question of relief to weavers?

A.—Yes.

Q.—Will you give the Commission briefly the contents of this note—its main facts?

A.—There are ordinarily about 8,000 looms with 25,000 workers.

Q.—How many were in your employ?

A.—1,500 looms.

Q.—What became of the other 6,500 looms?

A.—Some of the workers went to the Nizam's territory.

Q.—What principle did you adopt in selecting particular looms for labour?

A.—We established one municipal shed for the relief of the weavers: in that shed we admitted those who had no looms of their own.

Q.—How did you select the weavers?

A.—We admitted only those who were certified by the respectable members of their community as requiring relief.

Q.—Did you form a committee which went about inquiring into the circumstances of weavers?

A.—Yes.

Q.—And ascertaining those who had no work?

A.—Yes.

Q.—You gave them work in the weavers' shed?

A.—Not all; to some we advanced yarn (but no money), taking back finished articles.

Q.—Did you give advances through your own people or through middlemen?

A.—I managed the whole thing.

Q.—There was no middleman and no commission was paid to him?

A.—No.

Q.—There was no chance of fraud?

A.—No.

Q.—As far as the municipal work was concerned, the whole work was done by a body of gentlemen who gave their services gratuitously for the relief of weavers?

A.—Yes.

Q.—Do you consider that the result was that the weavers' relief was successful?

A.—Quite.

Q.—What amount did you actually spend?

A.—About Rs. 2,000; we recovered the whole amount and made a profit of Rs. 2,000.

Q.—The municipality made cent. per cent. profit?

A.—Yes; in ten months.

Q.—How did they manage that?

A.—We kept on selling the articles as they were made.

Q.—You also took money from the charitable fund?

A.—Yes.

Q.—Were you equally successful in making a profit?

A.—No; because we could not sell all the articles that were made.

Q.—How could the municipality manage to sell their cloth?

A.—Because the municipality had spent only Rs. 2,000 and their whole work was done in the municipal shed.

Q.—They did not give advances?

A.—No; they gave all materials and looms.

Q.—And as a result they sold the cloth at cent. per cent. profit?

A.—Yes.

Q.—Did they pay wages to the weavers?

A.—Yes.

Q.—I presume their wages were low?

A.—Yes.

Q.—Do you think that the weavers would otherwise have gone on relief works?

A.—No; they would have starved.

Q.—Why?

A.—Because they are used to weaving only.

Q.—What about their physical capacity?

A.—They are quite unfit.

Q.—Why?

A.—Because they are not accustomed to work in the sun and are not accustomed to work with pick and shovel.

Q.—In ordinary times they go to the fields?

A.—No.

Q.—They are not accustomed to it ?

A.—No.

Q.—But for this class of work they would have actually starved ?

A.—They might have gone to the Nizam's Dominions.

Q.—And might not have come back ? Were there certain immigrants to Hyderabad ?

A.—Yes.

Q.—A great number of the weavers went to Hyderabad ?

A.—Residents of Hyderabad went back.

Q.—They originally came from Hyderabad ?

A.—Yes.

Q.—The net result is that you took a stock of some value from these people and at the same time kept them from starvation or distress ?

A.—Yes ; but the stock was not a valuable one. We only produced such things as are used by bazar people.

Q.—You have made some suggestions for the future ?

A.—Yes.

Q.—Which method do you prefer : that of making them work at looms fixed up in a public shed and paying them wages, or advancing them the materials and allowing them to work in their own houses ? Is it necessary to make them work in a public shed ?

A.—Only those who have not got looms of their own should be admitted to the public sheds. There are some weavers who have got looms and no materials. And they should work at home.

Q.—Are there weavers who are working as labourers ?

A.—Yes ; they are thrown out of employment. In non-famine times there is a sufficient demand for them.

Q.—I see that the whole selection is done by the municipality without the interference of official or commercial management ?

A.—The Collector supervised all the operations.

Q.—Did the management of this business cost you nothing ?

A.—Almost nothing ; our establishment cost us not more than Rs. 100 a month.

Q.—How long did it last ?

A.—Ten months and a half.

Q.—And the result is that you have got a stock of cloth ?

A.—We have still some cloth worth about Rs. 600 ; we hope to sell it soon.

The President.—Did you supervise the distribution of charitable relief ?

A.—I was one of the committee.

Q.—Did you get up a subscription in Sholapur ?

A.—Yes.

Q.—Did you get a grant from the Charitable Relief Fund ?

A.—Yes : for distributing relief to *parda nashin* women and respectable women of other castes.

Q.—How did you ascertain what women were in want of relief ?

A.—We had on our committee two Muhammadan gentlemen ; I represented the Hindus, and there was another gentlemen on the committee for Rájput women.

Q.—Did you divide your relief organization into wards ?

A.—No ; into different castes.

Q.—Had you a sub-committee for each caste, or had you only a general committee ?

A.—We had only one committee. I managed Hindu widows ; a Muhammadan gentleman managed the Muhammadan widows, and another gentleman managed Rájput widows.

Q.—Were various castes concentrated in a particular part of the town, or were they spread over the whole town ?

A.—They were spread over the whole town.

Q.—How did you set to work to know what respectable women were in want ?

A.—I took the assistance of some respectable men of my own caste.

Q.—Did you take the assistance of particular men of a particular ward in going through that ward ?

A.—Yes.

Q.—You made inquiries—house to house inquiries ?

A.—Yes. We went from house to house for the first distribution, and then when we got the list it was not necessary to go from house to house.

Q.—When distress became general did more people come on your list ?

A.—Yes.

Q.—How did you make the distribution ? Was it in money or kind ?

A.—It was in money.

Q.—But for your relief a considerable number of people would have suffered ?

A.—Yes.

Q.—Did you also give gratuitous relief to other people who were not purely weavers ?

A.—There was one poorhouse for them.

Q.—Were they made to stay in the poorhouse ?

A.—Yes.

Q.—What class of people went to the poorhouse ?

A.—All the lowest classes.

Q.—Were there people in distressed circumstances who did not go to the poorhouse ?

A.—Yes ; there were some repectable Muhammadan and Hindu women.

Q.—Were there any people of the poorer classes, who were unable to go to relief works, starving without assistance?

A.—Yes; those who were unwilling to go to the poorhouse.

Q.—How were they relieved?

A.—They were made to go to the poorhouse in spite of their unwillingness.

Q.—How many were there in the poorhouse?

A.—I had nothing to do with the poorhouse.

Q.—Was health in the poorhouse good?

A.—Quite satisfactory; because though cholera was raging in the city, there were very few deaths from cholera in the poorhouse.

Q.—Could a person go to the poorhouse, have his meal, and then go back to his own house?

A.—No; he was not allowed. When he was fit to work he was discharged on some work.

Mr. Nicholson.—When there is famine the Moglai weavers go back to their own homes?

A—Yes.

Q.—Are these people largely in the hand of the *sowcars?*

A.—Invariably.

Q.—Do they work for a mere subsistence wage?

A.—Yes.

Q.—The *sowcars* can charge what interest they like?

A.—Yes.

Q.—Are the cloths woven by the weavers also woven in the mills?

A.—No; they are more durable than those produced in mills.

Q.—They do not compete with the mills?

A.—No.

Q—There are certain people who always use these cloths?

A.—Yes; they prefer them to the mill-made cloth.

Q.—I understand that in the previous famine a number of them were working on relief works and that a special relief camp was established for them.

A.—Yes.

Q.—Did they dig canals?

A.—Small earthworks.

Q.—The value of the earthwork compared with their wage as weavers is as three annas to the rupee.

A.—Yes.

Q.—So that on your relief works they did more or less five times the actual value of earthwork?

A.—Yes.

Q.—Therefore, comparing the relief work with earthwork, you have done five times more valuable work?

A.—Yes; and the work was done willingly.

Rai Bahádur Syam Sundar Lal.—Did you use ordinary hand-looms?

A.—Yes.

RAO SAHIB G. W. GADRE, MAMLATDÁR.

The President.—What is the name of your *taluqa ?*

A.—Sangola.

Q.—Was your *taluqa* much distressed ?

A.—Yes ; it was the worst of the *taluqas* in the Sholapur district.

Q.—Is it a *kharíf* or *rabí* country ?

A.—$\frac{2}{3}$ *kharíf* and $\frac{1}{3}$ *rabí.*

Q.—Was the *kharíf* of '99 a failure ?

A.—Yes.

Q.—How many annas per rupee were reaped ?

A.—Three to four.

Q.—And the *rabí* of 1900 ?

A.—It was quite a failure. It only produced fodder and no grain.

Q.—When was relief first commenced in your *taluqa ?*

A.—In October.

Q.—What was the first step taken ?

A.—Small test works were commenced.

Q.—How long did they last ?

A.—For a month or two. I was not *mamlatdár* then.

Q.—When did you become *mamlatdár ?*

A.—Six months ago. I was District Agricultural Inspector.

Q.—What are the duties of District Agricultural Inspector ?

A.—To inspect works of the Circle Inspectors. I was in charge of the District Survey Office in which the District Survey records are kept.

Q.—Was it your duty to make any alterations from time to time of the survey records ?

A.—When sanctioned by the Survey Commissioner and Superintendent of Land Records.

Q.—What sort of changes are you authorized to make ?

A.—When one survey number is divided up the portions are measured by the Circle Inspector and numbered.

Q.—Do you mean by a number, a field ?

A.—Yes ; it is denominated by a survey number.

Q.—That is the smallest division known to the revenue survey ?

A.—Yes.

Q.—These survey numbers average about how many acres ?

A.—In dry crop land not less than 3 acres ; in garden land 20 *guntahs* (half an acre).

Q.—In irrigated land ?

A.—The same.

Q.—What is the greatest area to which a survey number can be given ?

A.—It may be as much as 20 acres and as little as half an acre.

Q.—Then I presume the original survey numbers have been split up ?

A.—Yes ; under the orders of the Courts.

Q.—The Civil Court or Revenue Court ?

A.—Civil Court.

Q.—If an original number was divided into four parts, what number would the four parts bear ?

A.—The last number in the village.

Q.—Suppose the last number was 300 ?

A.—Then they would be 301, 302, 303 and 304.

Q.—Not sub-divisions of the original number, *e. g.* $\frac{110}{A}$, $\frac{110}{B}$, etc.?

A.—No.

Q.—What was the lowest officer under you ?

A.—The circle officer.

Q.—What are his duties ?

A.—Measuring the land and inspecting the crops, testing the work of the village officers.

Q.—What do you mean by measuring land ? Is it when a decree is given for the division of a survey number ?

A.—Yes.

Q.—Does he measure it afterwards ?

A.—Yes ; and when alluvial lands are formed.

Q.—A survey number may be split up as the result of a partition ?

A.—Yes.

Q.—When a survey number is partitioned between occupants ; how are these numbers put upon the list, do they come at the end of the lists.

A.—Yes.

Q.—Is there any limit to that?

A.—It must not be less them 3 acres in dry crop land and half an acre in garden land.

Q.—Then the Circle Inspector, besides his duties of survey which you have explained, also looks after the crops ?

A.—Yes.

Q.—Does he make out a crop statement year by year?

A.—No.

Q.—What duty has the *patel*?

A.—He goes over the crop with the *kulkarni*, and the crops are written up in a certain statement.

Q.—What is the statement? Does it show the area under every crop?

A.—Yes.

Q.—The crops that are sown are put in a certain column and the area is put down in that column?

A.—Yes.

Q.—With that statement what do the *patel* and *kulkarni* do?

A.—They go over the fields and note down the crops in each survey number.

Q.—Do they note the crops in any sub-division of a survey number?

A.—Not separately. They note it down in a *pote* number.

Q.—What is a *pote* number?

A.—If there are several crops in the same number, they are measured and put down.

Q.—If the owner of a survey number divides the survey number into smaller fields do the *patel* and *kulkarni* take cognizance of them?

A.—No.

Q.—Have the *patel* and *kulkarni* a map?

A.—Yes; a map in which the survey numbers are shown.

Q.—Are any of the internal details shown?

A.—No.

Q.—If for instance, there is a survey number which consists of 6 acres, of which 3 are *jawari*, 2 cotton and 1 *bajra*. Does the village map show the 3, 2 and 1 separately?

A.—No.

Q.—There is no internal division of a survey number. It is only shown as one plot?

A.—Yes.

Q.—Does the field book show it?

A.—No.

Q.—What is the name of your field book?

A.—Village Form No. I.

Q.—Is there in that statement any detail of the internal measurements of the survey shown?

A.—No.

Mr. Nicholson.—And supposing you have survey form No. I and in the month of September there are 10 acres of crops; *bajra* 5, horse gram 3 and *til* 2; that is shown separately?

A.—Yes, the crops are shown separately and the area is also shown separately in Form No. III not Form No. I.

The President.—How do you get the area?

A.—By calculation.

Q.—It is measured?

A.—No.

Q.—It is only an estimate?

A.—Yes; the calculation is made by the Circle Inspector.

Q.—Does he ask the owner how much is sown with *bajra*, &c.?

A.—No; he makes an inspection and then estimates.

Q.—There is no measurement of the land sown with each individual crop within the survey number?

A.—No.

Q.—Your statistical information as to the quantity of *bajra* or cotton in the district is more or less an estimate?

A.—Yes.

Q.—Your *patel* and *kulkarni* at a certain time of the year go about and write up this statement showing all the crops and area under each crop. Do they put down an estimate of the outturn?

A.—No.

Q.—Is that given in any statement which is prepared during the year?

A.—No; the estimate is given at the end of the year, it is not given in any of the forms.

Q.—The *patel* and *kulkarni* give no estimate as to the crop yield?

A.—No.

Q.—How many statements do they send up in the year?

A.—One statement.

Q.—What do you call it?

A.—Register of crops, Form No. 16; all survey numbers and crops are entered in it.

Q.—But no estimate of the yield?

A.—No.

Q.—How many other statements regarding the crops do they send up?

A.—This is the only statement; it is prepared for statistical purposes and the same is treated for revenue purposes. Form No. 16 is sent to the *taluqa* from which the general statement is prepared.

Q.—Give me an instance of a revenue form as distinguished from a statistical form?

A.—Form No. 5 in which the amount of money which has to be collected from each individual is noted down at the time of the *jamabandi.*

Q.—Give me an example of a statistical form?

A.—Statement No. 16—a statement of cattle and of wells, births and deaths.

Q.—Do the revenue statistics go to the Revenue Inspector?

A.—No, the Circle Inspector goes over the villages and inspects.

Q.—To whom does the statistical statement go?

A.—It goes to the *taluqa.*

Q.—Does not the Circle Inspector get it first?

A.—He inspects the statement on the spot.

Q.—Does the *patwâri* keep the statement until the Circle Inspector goes round?

A.—Yes.

Q.—Does the Circle Inspector visit every village?

A.—Sometimes he cannot.

Q.—If he cannot do it the *patel* and *kulkarni* send the statement on?

A.—Yes.

Q.—To whom?

A.—To the *mamlatdâr.*

Q.—From the *mamlatdâr* to whom does it go?

A.—Through the Collector it is sent to the Director of Land Records.

Q.—Does it go to the District Inspector?

A.—The compilation of the district statistics is made by the District Inspector.

Q.—Does any statement go to the Circle Inspector from the *patel* and *kulkarni?*

A.—No.

Q.—Does the Circle Inspector send any statement to the District Inspector?

A.—No; he corrects the statement of the village officers.

Q.—The duties of the Circle Inspector are to verify the figures in the *patel* and *kulkarnis'* statements and the duties of the District Inspector are to compile statistics and to test the Circle Inspector's work?

A.—Yes.

Q.—By testing the Circle Inspector's work he also tests the *patwâri's* work?

A.—Yes.

Q.—And he also compiles the statistical information necessary for the district?

A.—Yes.

Q.—Well, you found the crop was likely to be a failure and reported the fact?

A.—Yes, I was told to go and inspect the crops.

Q.—You made your report for each *taluqa?*

A.—Yes.

Q.—You are only *mamlatdâr* of one *taluqa,* are you not?

A.—Yes, now.

Q.—You went out in accordance with the orders of the Collector and inspected a percentage of the villages. When did you become *mamlatdâr?*

A.—In July.

Q.—Then you know about famine relief. Will you tell me how you managed the village dole?

A.—In the first place when the dole was given, village officers kept registers which were checked by Circle Inspectors, each Circle Inspector had from 15 to 25 villages, the Circle Inspector used to visit the villages and test the village records as regards the doles.

Q.—In the village did you organize any non-official agency?

A.—No; there were two or three respectable men who inspected the dole.

Q.—Were these men made use of to select the persons to receive the dole?

A.—No; the men were selected by the Circle Inspectors.

Q.—Do you think if you had associated yourself with them you could have obtained valuable information?

A.—Yes.

Q.—Do you think it would have been safe to have entrusted to them the distribution of the dole altogether?

A.—I do not think so. There are not men capable of doing it in all villages.

Q.—In your villages were there any works undertaken?

A.—Yes; two small works.

Q.—Were any works entrusted to the principal men of the village to carry out?

A.—No.

Q.—Can wells be made with advantage in your *taluqa?*

A.—Yes.

Q.—Could tanks be made?

A.—No; the soil is rocky.

Q.—Do you think that if money was advanced to the principal men of the village and they were told to dig wells and the quantity, &c., of earth estimated, that they might be trusted to carry out the work and pay the labourers?

A.—No; I don't think so. In very few villages could trustworthy persons be found.

Q.—How much land would a respectable landholder hold?
A.—From 100 to 500 acres.
Q.—Would this landholder be a *mahajan* or a cultivator?
A.—In some cases he would be a *mahajan*, in some cases a cultivator.
Q.—Are the people usually indebted?
A.—At present they are generally indebted. In the Sangola *taluqa* there has been no crop for 4 or 5 years.
Q.—Were they indebted before these bad seasons came on?
A.—No.
Q.—They were a substantial tenantry?
A.—Yes.
Q.—Are such men willing to take *takávi* advances to improve their land?
A.—Yes; we have advanced as much as 400 to a single cultivator for wells.
Q.—Would the cultivators, do you think, club together for the purpose of starting mutual assistance banks?
A.—No; I do not think so. They have no trust in each other.
Q.—The distribution of charitable relief in the villages was by grain doles. Were there any kitchens in the village?
A.—No.
Q.—Was every person from a work, who was considered fit for the grain dole, sent to a kitchen?
A.—Those within a radius of a certain number of miles only were sent to the kitchen.
Q.—Did the people stay there?
A.—Yes; and so our kitchen was practically a poorhouse.
Q.—And did they stay if they could do no work?
A.—Yes; but if they could do a little work they were put on to work.
Q.—And if they were not able to work and had no protectors they were still kept in the kitchens?
A.—Yes.
Q.—So that the people on gratuitous relief need not necessarily have been dependants of workers?
A.—No.
Q.—Were there not a number of people who were rather in the way? Would it not have been better to relieve them in another village?
A.—Yes; but that would have been expensive.
Q.—Would it have been more expensive to give them grain doles in their villages? They were sent to the kitchens as a test?
A.—Yes.
Q.—What sort of crop is generally grown in the *taluqa?*
A.—*Bájra.*
Q.—How many maunds of *bájra* do you get from an acre of average land?
A.—One maund of sixty-four seers.
Q.—How many pounds?
A.—One seer makes 3½ pounds. The soil is not good; it is very light.
Q.—What is the revenue per acre?
A.—The maximum is Re. 1-3-6; the minimum one anna per acre.
Q.—Could you give an average?
A.—No.
Q.—From land paying Re. 1-3-0 how many maunds of *bájra* would you get?
A.—I may estimate it at one maund of sixty-four seers.
Q.—You have no information on the point?
A.—No.
Q.—But you were a District Inspector and it was your business to go about and inspect these crops?
A.—I have not made any proper experiments.
Q.—How long were you a District Inspector?
A.—Nearly five years.
Q.—And you do not know what the yield of an acre of *bájra* is on good land?
A.—From one to two maunds.
Mr. Nicholson.—Did they grow any mixed crops with the *bájra?*
A.—Yes; *túr* and pulse, *múng makki.*
Q.—Are these invariably grown?
A.—Yes.
Q.—Then in addition to one maund of *bájra* you have the product of these pulses.
A.—I cannot say.
Q.—But they do grow together?
A.—Yes; as a rule.
Q.—There will be a crop of *túr* as well as a crop of *bájra* on the same ground?
A.—Yes.
Q.—How much *túr* do you get on an average? Is it not usually said that pulses pay the assessment and the crop pays the cultivator?
A.—Yes; I think so.

Q.—You have told the President that the statistics were estimates merely, but in all the fields that are wholly grown with one crop the exact area can be obtained?

A.—Yes.

Mr. Bourdillon.—The Collector told us everybody who could walk had to go as a test to the kitchens. These were on the relief works, were they not?

A.—Yes.

Q.—I suppose in addition to that there was a considerable number of persons in the village getting grain doles, who could not work?

A.—Yes; those who were blind, etc.

Q.—And suppose a person absolutely refused to go from caste scruples or otherwise. They were also put on the grain doles?

A.—Yes.

Q.—Who decided that?

A.—The Circle Inspectors or *mamlatdárs.*

Q.—That system could have been extended also to other people. They could have given up the kitchens altogether and extended the number of doles. If you trust the local agents with the one you can trust them with the other. You said just now you were rather suspicious of local officers?

A.—Yes.

Mr. HANTMANTDAS SINGI, MERCHANT.

Indebtedness has largely increased in the district. The part I took in the famine relief operations was the distribution of doles. I was a member of the village relief committee. I have visited many villages and kitchens and so have large experience. The dole is preferable to kitchens, as in the former a better check can be exercised. So long as the distribution is in the hands of poor paid subordinates, it will be unsatisfactory. *Patels* did a great deal. Well digging would be of great use to the villages and a great deal could be done in the way of banking up streams and distributing the water; such work can be carried out in Bijapur and Sholapur, which are the only places of which I can speak. I do not consider the 19 *chhataks* and 15 *chhataks* scale too much, I prefer the payment by results system with provision for dependants.

R. B. VITHAL TIKAJI UPLAP, ADMINISTRATOR OF AKALKOT.

The President.—You were administrator of the Akalkot State?

A.—Yes.

Q.—Is that a feudatory State?

A.—Yes.

Q.—Was there much distress there?

A.—Yes.

Q.—Was there much emigration from the state?

A.—No.

Q.—The Commission is not authorized to enquire into the administration of famine relief in any of the native states, but can you give us any information regarding the administration of famine in the British districts in the neighbourhood? Did any British subjects come into the Akalkot State?

A.—No; but people from the Nizam's territory came in.

Q.—What sort of relief works had you?

A.—Village tanks and roads.

Q.—Had you a general scheme of village works?

A.—Yes.

Q.—Had you more village works than roads?

A.—Yes.

Q.—How many village works were there altogether?

A.—About 25.

Q.—Was village work cheaper to the state than roads?

A.—Yes; I think so.

Q.—And there has been a good deal of work done that will be of permanent use to the state?

A.—Yes.

Q.—Were any irrigation wells and tanks dug?

A.—I had 150 new wells dug; 25, which had no water, repaired.

Q.—Are these masonry wells?

A.—The wells are lined with stone up to the water's level.

Q.—What is the diameter of the wells?

A.—About 30 feet.

Q.—Do you build them so wide? They must be *baodis?*

A.—Yes; and there are also small ones for the use of the villagers.

Q.—How much did it cost to make one of these *baodis?*

A.—From Rs. 200 to Rs. 400.

Q.—How did you pay your labourers? Were they paid by the state or did you trust the matter to the village *panchayet?*

A.—They were paid by the state.

Q.—There is always a *panchayet*, I suppose, for caste purposes?

A.—Yes.

Q.—If these village *panchayets* are approched in the proper way they can be got to do a good deal of useful work?

A.—Yes.

Q.—Are you a British subject?

A.—Yes; I have served in a British district as *mamlatdár.*

Q.—Would it be safe to trust the administration of gratuitous relief in the villages to the *panchayet?* Do you think that they would be likely to swindle Government on the one hand or on the other be unfair to the poor people in the village?

A.—In large villages I think the work could be done satisfactorily, but in small villages I would not trust the village accountant.

Q.—Your evidence is important in showing that the village *panchayet* is a living organization which can be made use of and to whom in the larger villages you think that the administration of village relief might be entrusted without any great danger of Government being swindled on the one hand or of the people being treated unfairly on the other. You are also of the opinion that these village tanks and wells are more useful than road work?

A.—I think road work is useless.

Q.—Do you think it is necessary to have a survey made to decide which would be the most useful work?

A.—I think the people of the village know better than the survey people.

Q.—You cannot get that survey of works done without associating the village people with you?

A.—No.

Q.—Do you think that the Revenue Assessments in the districts that you know press heavily?

A.—No; not heavily.

Q.—We have had certain evidence which showed that the assessment is about 10 per cent. of the gross produce, is that your experience?

A.—It is about 10 per cent.

Q.—Do you think that the pressure of the assessment has had any substantial effect in weakening the power of the people to resist famine?

A.—No.

Q.—Famine is due to other causes?

A.—Yes, chiefly to the failure of the rains.

Q.—People are greatly indebted; are they not?

A.—Yes.

Q.—And it very often happens that the original owner of the field has become a sub-tenant of the *soucar?*

A.—Yes, in many cases.

Q.—What does the *soucar* take?

A.—He takes one-fourth more than the proper assessment on the average.

Q.—From your knowledge of Native States and British territory would you recommend that there should be an amendment of the law limiting the rent which can be taken from sub-tenants?

A.—I think it would be better in such cases to establish agricultural banks to get the people clear of the *soucar.*

Q.—We have been told that there is not sufficient mutual trust among the people to allow them to combine for the establishment of an agricultural bank. Do you think such trust could be worked among them?

A.—There should be a bank at the cost of the state.

Q.—That is to say the state would give advances?

A.—Yes.

Q.—There would be many small banks in villages. Do you think if the state was willing to advance Rs. 500 here and Rs. 500 there, that people in villages could be got together to administer it?

A.—Yes.

Q.—That there would be sufficient local intelligence and honesty to manage its affairs?

A.—Yes; if you cannot find persons in one village you could in another.

Q.—Would the *soucars* take fright at any such arrangement?

A.—They would reduce their rates of interest.

Q.—Would the *soucars,* do you think, foreclose their mortgage?

A.—The *rayat* would have the support of Government in that case. He would not get support from Government for all the purposes for which the *soucar* gives him money.

Q.—But only for agricultural improvements. He would not, for instance, get it for weddings. Do you think the *soucar* would let him join?

A.—Then I don't think the *soucar* would let him join.

Q.—Would that militate against the success of the proposal?

A.—I think the state must give him advances for all purposes.

Q.—That is an impossibility? If the state did anything it would advance money for agricultural purposes?

A.—The system may have to be worked for a year or two to see how it succeeded.

Q.—Take a village in which 50 respectable cultivators, some small, some big, joined together and said we will establish an agricultural bank and each give a contribution of, say, 4 annas as an entrance fee and they then appointed four or five people to manage the bank. Then suppose Government advanced a sum of Rs. 1,000 with interest at 3½ per cent., nobody but members would be entitled to advances from the bank, a man might come and ask for Rs. 20 to build a well or to buy seed or buy a bullock. The banks would see if he really wanted it and was a trustworthy man and would then after having satisfied itself advance him Rs. 20 on perhaps 8 per cent. In the course of time the bank would be able to repay the Government loan and would also be able to make some advances from its own funds. In that way there would be a fund created which would belong to all the members of the association. Do you think it is possible to start such an association?

A.—Yes; I think so.

Q.—Do you think if the *soucar* believed that his business would be reduced that he would be opposed to it?

A.—Yes.

Q.—Is there a sufficient number of *rayats* not indebted to the *soucar* to work a scheme like that.

A.—I think about 40 per cent. would be found clear of debt.

Q.—Do you consider that in Sholapur there is an opening for an experiment of that description?

A.—Yes.

Q.—In Poona do you think there is?

A.—There might, but natives are generally backward about new matters.

Q.—Have you had any experience of Hindu associations called *Akharas?*

A.—No; there is no such thing in Sholapur.

Rao Bahádur Syam Sunder Lal.—What is the irrigating capacity of these *baodis?*

A.—They can irrigate about 5 or 6 acres.

Mr. Nicholson.—Did you ever dig these by famine labour ?

A.—Some by famine labour and some by *takávi* advances.

Q.—They would require blasting and pickaxe and crowbar work. Could you get famine labour to do that ?

A.—Yes.

The President.—What were the wages paid by you ?

A.—We had the same system as in British territory ?

Q.—Were they paid a certain wage no matter what they did ?

A.—I insisted upon a certain amount of work being done.

Q.—You didn't like the Famine Code system ?

A.—No.

MR. W. P. SYMONDS, SURVEY COMMISSIONER AND DIRECTOR OF LAND RECORDS AND AGRICULTURE.

The President.—You are Survey Commissioner and Director of Land Records and Agriculture?

A.—Yes.

Q.—How long have you been in this office?

A.—Two years and two months.

Q.—Before you joined your new office had you had considerable experience of the ordinary revenue administration of the province?

A.—Considerable.

Q.—You are acquainted with the early history of the province in a general way before it came under the British rule?

A.—Yes.

Q.—In Bombay, as in any other part of India, they had village communities?

A.—I believe they had them and they were broken up before we came in.

Q.—I am coming to that. You say that before the advent of British rule these village communities had been interfered with and were entirely broken up?

A.—Yes. I have quoted the remarks of Mr. Rogers on the subject in a report I recently submitted to the Government.

Q.—During the continuance of those village communities the assessment was managed, I presume, through the representative of the community?

A.—I believe so.

Q.—The representative of the community corresponds with the officer who is now called the *patel?*

A.—Yes.

Q.—That is to say the native administration decided what particular amount of revenue would have to be paid by the village, allowing the village communities to distribute them amongst themselves, and requiring from their representatives punctual payment of the amount of assessment?

A.—Yes, exactly.

Q.—The native governments always maintained in their own hands the power to see that the village communities were not oppressed?

A.—Yes. I believe so.

Q.—Over the representative of the village community in regard to revenue questions was the *kulkarni?*

A.—Yes.

Q.—And the representative of the State was called a *kanúngo.* Is there at present any officer corresponding to him?

A.—The Circle Inspector.

Q.—But I understand that he deals with agricultural statistics and not with the collection of revenue.

A.—That is so.

Q.—You have in your system no person to look into and control the action of the *patwári* except the *mamlatdár* and his assistants?

A.—That is so.

Q.—The system of village communities to which we have referred lost its vitality before the advent of the British rule?

A.—Yes, except in particular localities.

Q.—The reason of that was the system of revenue administration introduced by the Mahrattas?

A.—Yes.

Q.—Therefore when the Bombay Government came to revise the land revenue system in the "forties" it did not find any solid body corresponding with the village community?

A.—It did not.

Q.—It was accordingly compelled by the force of circumstances to adopt a policy of individualism in dealing with the occupier?

A.—Yes.

Q.—And not with the community?

A.—Yes.

Q.—In dealing with the occupier it took the field as the basis of its system?

A.—Yes.

Q.—Am I to understand that while the field continued a unit as far as the land revenue assessed upon it is concerned, the occupier can subdivide it and sell or mortgage or otherwise dispose of a portion of the field?

A.—Certainly.

Q.—But if the land revenue assessed on the field fall into arrears then Government can recover the land revenue by selling the field free of all encumbrance created by the holder in the shape of mortgage or sale or sub-division?

A.—Yes, certainly; it is possible theoretically, but it is very rarely done.

Q.—Why is it rarely done? Is no difficulty experienced in satisfying the Government demand?

A.—That is not the reason. The great difficulty is that the lands would pass into the possession and proprietorship of the money-lenders, whom we do not wish to have on our register. The money-lenders and the *rayats* themselves would also not like it.

Q.—Then the money-lenders would have to stand forth as registered occupiers of the land?

A.—Yes, and they have a very great objection to standing forth as occupiers as they would be compelled to pay up all arrears.

Q.—Do you mean to imply that sales are not frequently resorted to because of the unwillingness of the money-lenders to become registered owners?

A.—Only partly. The chief reason why the rules are not more frequently resorted to is the unwillingness of the Collector by adopting exceedingly hard measures to expatriate the owners of lands, and put in *márwáris* or other money-lenders as proprietors.

Q.—Then how does the Collector recover the arrears of land revenue?

A.—A notice is issued by the *mamlatdár* on every registered occupant who does not pay. If he does not pay at once a penalty is imposed which may amount to one-fourth of the arrear.

Q.—The ultimate remedy is, I presume, the sale of the land?

A.—The sale of the land is held *in terrorem* over him.

Q.—Is there on the part of the money-lender any objection to having that ultimate process adopted and being compelled to buy the land and have his name registered?

A.—The money-lender will let anything be done rather than have his name entered, for if his name is entered he will have to pay all arrears of revenue and the revenue of every following year, and even if the crops wholly fail for five years no mercy will be shown him, he will have to pay for those years.

Q.—The position is this. You may have an occupier as a registered occupier, while the money-lender retains his holding and keeps him as his sub-tenant?

A.—That is quite a common case. I may mention that the cultivator distinguishes very little between the proprietor and mortgagee without possession.

Q.—In the case in which the money-lender is *de jure* proprietor of the land the actual cultivator is the sub-tenant?

A.—No; he would not acknowledge that: he will consider himself *de facto* and *de jure* proprietor.

Q.—There are no limits upon the rents which the money-lenders exact from the sub-tenant?

A.—There is no law limiting the demand.

Q.—We have been told that in some cases he exacts as much as 50 per cent. of the produce *plus* the Government assessment?

A.—It is not more than half the produce: that is not a high rent. It is a common rent in the Deccan.

Q.—Fifty per cent. of the gross produce is taken all over the Deccan?

A.—Yes, and all over France and Spain.

Q.—Who estimates the amount of the produce?

A.—The money-lender and the cultivator together. They make an estimate on the spot. It is done without friction, as it is to the interest of the money-lender to live on good terms with his sub-tenant.

Q.—Do you not think it is desirable that there should be an amendment of the law whereby the rent recoverable from the tenant should be subjected to some limitation?

A.—I would not say that it is not desirable. Such a law might be useful in certain districts like Thanna and Colaba near Bombay, where there is rack-renting. But in the Deccan where the rent is half of the gross produce, I do not think that a law could do any good. It might be useful in certain cases, and it could be no harm; but it is not absolutely required, because we cannot protect those who agree to pay a certain percentage of the produce.

Q.—Taking the figures you supplied to me, I find that only in three districts is the incidence of land revenue more than 10 per cent. on the gross produce. These districts are Ahmedabad, Broach and Kaira. Your assessment as shown by these figures is as follows:—

in Ahmedabad it is 10·66 per cent.;
in Kaira it is 13·71 per cent.;
and in Broach it is 16·90 per cent. of the gross produce?

A.—Yes.

Q.—Elsewhere throughout the province the incidence of land revenue on the average is under 6 per cent. and only in Khandesh, Satára, Bijapur and Dhárwár does the assessment exceed 6 per cent. of gross produce, and in these districts it only exceeds 6 per cent. by a fraction. Am I justified in saying that in your opinion the land revenue assessment throughout the Presidency, with the exception of these three districts, is extremely moderate?

A.—Yes.

Q.—These figures have been calculated on foodgrain crops?

A.—Yes.

Q.—To the exclusion of non-food grain crops?

A.—Yes.

Q.—Non-foodgrain crops are more valuable than foodgrain crops upon which these statistics have been provided?

A.—They are as a rule.

Q.—Consequently if the non-food crops had been taken into calculation the incidence of land revenue upon gross produce would be considerably less than is shown in these statistics?

A.—It would be in most of the districts, but not in all districts.

Q.—If in the Ahmedabad, Kaira and Broach districts, which are highly assessed, you included all the non-food crops it would bring down the incidence of assessment considerably?

A.—Certainly, in the Broach and Kaira districts it would, but in the Panch Mahals it would not.

Q.—In the Panch Mahals the assessment is extremely low?

A.—Yes.

Q.—It is 4·93 per cent.?

A.—Yes.

Q.—In Ahmedabad it would bring it down to a certain extent?

A.—Yes.

Q.—In Kaira it would bring it down much more?

A.—Yes.

Q.—In Broach it would bring it down considerably more?

A.—Yes.

Q.—In all those northern divisions of Gujrat the assessment, if calculated on foodgrain crops and non-food grain crops alike, would probably be not over 10 per cent.?

A.—Yes, of gross produce.

Q.—Having regard to this incidence of land revenue, are you of opinion that the Government assessment is to any considerable extent a factor in the people's inability to resist famine on this occasion?

A.—No, certainly not.

Q.—With regard to the Deccan your statement is no doubt borne out, but in regard to Gujrat, where the assessment still maintains the position of 10 per cent. to 15 per cent. of the gross produce, it does not seriously affect the capacity of the people to resist pressure?

A.—No, certainly not. It might if they had had previous bad years. They had not bad years. They had very fair years.

Q.—That being the case, seeing the Government assessment is very low in the Deccan, and on the average taking all the crops not more than 12 per cent. in Gujrat, do you think that the *rayat* is able to save from one year to another and from the savings in good years meet the deficiency of bad years?

A.—I do not think so.

Q.—Would you be disposed to say that no matter how low the Government assessment may be pitched, the conditions of rural life are such as to make it hopeless to expect that the *rayat* will save from one year to make good the Government revenue in another?

A.—That is exactly what I would say.

Q.—Are you of opinion that a policy of suspension of the Government revenue in years of substantial crop failure is a suitable policy for your province?

A.—It is absolutely necessary.

Q.—In carrying out a policy of suspension, leaving remission alone, would you be disposed to graduate it with regard to the character of the crop failure of a particular village? Would you make the grant of suspension depend upon the degree of crop failure?

A.—I would.

Q.—Would that hold in almost every district?

A.—Unfortunately the incidence of revenue is not perfectly uniform.

Q.—There is a great deal of uniformity?

A.—The actual incidence is very much lower on the average in the Deccan; the rule of the Deccan would not apply to Gujrat.

Q.—You would differentiate local areas, but would graduate your suspension according to the degree of the crop failure?

A.—Certainly.

Q.—Accepting, as you do, the policy of suspension of land revenue in Bombay on the occurrence of crop failure not amounting to famine, would you, in determining your suspension, have regard merely to the fact of crop failure over a particular area or would you, before deciding on suspension, inquire into the capacity of the individual to pay the revenue.

A.—I would not inquire into the capacity of the individual, as a rule.

Q.—Do you think that to be effective suspension should be uniform over a large tract of the country?

A.—Not over a very large tract of the country, because crops vary in the same *taluqa*. I would class villages into groups according to their outturn.

Q.—Would you be disposed to say that a *taluqa* would be the suitable area?

A.—Generally it would be. Sometimes the rainfall in the west gives a good crop, while in the east you have no crop at all: so that you cannot treat the whole of a *taluqa* under one system.

Q.—You would be disposed to give remissions over a large area in which the crop failure was uniform?

A.—Yes.

Q.—You do not think that the circumstances of the individual should be inquired into?

A.—No, with certain exceptions in the case of rich men.

Q.—You say that with certain exceptions you do not think it desirable, preliminary to suspension of revenue, to inquire into the circumstances of individuals.

A.—No, I think it is useless.

Q.—In regard to exceptions would you be disposed to adopt the Panjáb principle of a division of people into rich and poor?

A.—That is the system we have at present, but it does not work.

Q.—What principle would you be disposed to follow?

A.—I would have two classes. The first consisting of the agricultural community who work with their own hands. Some of them may be rich. In the second class I would put money-lenders, capitalists and people from outside who are non-resident holders. At present a great deal of land is in the hands of men whom I would put in the second class.

Q.—With a view to inaugurate your policy, would you think it desirable to bring on record the names of those capitalists or money-lenders into whose hands the land actually passes.

A.—I should not. I do not advocate the record in our accounts of the names of the money-lenders who are the real proprietors.

Q.—What are your reasons for that?

A.—The rigid system of land revenue collection now in force has the marked effect of keeping land out of the actual proprietorship of the money-lender's class, and where the land has passed into their proprietorship we do not want to recognise the fact in our revenue accounts.

Q.—Then would you prefer to have a system of revenue register and account which is not a true record of facts?

A.—We hope to see a Land Alienation Act introduced on the lines of the Panjáb Act.

Q.—You hope to see legislation on the lines of the Panjáb Act, whereby the land will get back into the hands of the original holders.

A.—Yes, exactly.

Q.—Could you not deal differentially with the money-lender who has become actual proprietor and the money-lender who is only a mortgagee?

A.—It would be very difficult. Owners of fields would not know in what position they are and money-lenders would also not know the difference between a proprietor and a mortgagee with possession. There is no practical distinction.

Q.—So that your reason for preferring the existing system of uncertainty regarding the proprietorship of land is the hope which you entertain that the original occupier will in time recover possession?

A.—That is so. One day Government must come to recognise the manifest disadvantages of the present system.

Q.—And take measures which will have the result of repatriating the actual cultivator?

A.—That is my belief.

Mr. Bourdillon.—Is that belief largely held?

A.—Every Revenue officer believes it.

The President.—Do you think that every Bombay Officer shares the hope that this consummation will in course of time be effected?

A.—I believe so.

Q.—In times of famine or of pressure does the money-lender ever assist his sub-tenant or the actual cultivator of the field?

A.—I believe he does sometimes, but very rarely.

Q.—Were you here during the last famine of 1900?

A.—Yes.

Q.—Was it your experience and belief that those money-lenders who are *de facto* proprietors did not in any way discharge their responsibility towards their tenants?

A.—That is certainly my belief, as a rule, but there is some excuse for them. In times of famine their credit is gone; there is difficulty in raising cash.

Q.—We were told that in anticipation of distress when pressure began to manifest itself in any district, revenue establishments were increased for the purpose of dealing with famine.

A.—Yes.

Q.—We were told that all the officers were duplicated and that assistants were appointed. Do you know whether there was a definite order issued directing that the establishment should be strengthened?

A.—I think there was no order.

Q.—Do you know whether the *kulkarnis* and village accountants were increased in number or were they given assistance?

A.—No. I believe they had no assistance. It is not customary to increase the number of *kulkarnis*; one man in each village is sufficient.

Q.—As far as the famine relief was considered you think that the number of *kulkarnis* was not increased?

A.—No, it was not.

Mr. Nicholson.—Do I understand that the Revenue Code gives power to fine the cultivator up to one-fourth of the assessment that remains in arrears?

A.—That is so.

Q.—Can that be by process?

A.—Yes.

Q.—Do I also understand that the *mamlatdár* had instructions to endeavour by persuasion or threat to make the *rayat* pay?

A.—Yes. The *rayat* is very stubborn.

Q.—You told us that you did not think the *rayat* could save from year to year, although the assessment is so small compared with the gross produce?

A.—Yes. He does not save in the shape of money, but in jewels, ornaments, and brass pots.

Q.—He does not save it in good shape?

A.—No.

Q.—Is it possible to devise some means by which cultivators could put their savings in an easily realizable shape?

A.—Certainly, but you have to consider that all of them are in debt.

Q.—Is it a fact that storing of grain in any way has disappeared from the province?

A.—I believe it still exists.

Q.—Do you think that substantially rich people still store grain considerably?

A.—Yes.

Q.—Do you think it would be a very good improvement if some simple means could be devised whereby the individual *rayat* may be enabled to place his savings in a secure position and realize that when he requires it?

A.—Certainly.

The President.—Do you think that they would take advantage of it?

A.—I cannot say. I have heard of people who have grown rich spending their money in putting silver tires to their carts.

Mr. Bourdillon.—You say that the system of saving is universal. Have you found that even the smaller people saved when they came on works?

A.—I do not know personally, but I believe everybody had something put by.

Q.—Do you think they exhausted their savings before they came to work for 12 *chhataks?*

A.—Yes.

The President.—We have been told that if the occupier fails to pay any instalments of revenue then the entire year's revenue may be recovered from him. Say he fails in the payment of *kharíf* instalment of revenue then the *mamlatdár* issues, notice to him for the recovery of the entire year's demand.

A.—Yes. I doubt if this is done. It is intended, I suppose, to save the *mamlatdárs'* trouble.

Q.—Is it your opinion that the Deccan Agriculturists' Relief Act has had no substantial effect in extricating the tenant from liability, and that the tenantry of the district in which that Act has been in force for so many years are substantially in no better position than they were before the Act was passed?

A.—The Act has had one good effect in diminishing the amount of litigation. The money-lender is no longer able to say to the occupier, "I will take you to the civil court." Elsewhere the civil courts are bound to take the bonds signed by the *rayats* in their literal sense. We should never think of interpreting the bonds signed under compulsion too literally. We should go behind the bonds.

Q.—But you do not consider, so far as the extrication of the peasantry from their position of indebtedness is concerned, the Act has effected any substantial good result?

A.—I do not think so.

Q.—On the question of legislation regarding indebtedness, would you prefer such legislation should be on the lines of the Panjáb Act; is that the backbone of your proposals for improvement?

A.—We are most anxious to avoid the installation of the money-lenders as actual proprietors.

Q.—If the consummation which you hope cannot be secured you must recognize the money-lenders as the actual proprietors of the lands which are mortgaged with them.

A.—If the money-lenders are allowed to be recorded as actual proprietors I believe there would be agrarian riots.

Q.—That would happen in case of land which is sold outright?

A.—It is only a small proportion.

Q.—I presume the mortgages of land are usufructuary?

A.—Yes.

Q.—Would you be disposed to favour the practice in vogue in Northern India where the tenant says to the money-lender, "You may have possession of this land; do what you like with it for fifteen years, (or whatever period is fixed, but not more than twenty). Within that period you may recoup yourself and after that period give the land back to me, the original holder free of all encumbrances"?

A.—I should not advocate that; certainly not.

Q.—Then how do you hope to extricate the *rayat* from the clutches of the *márwári?*

A.—I am not convinced that it is necessary to extricate him. You cannot provide him with capital, and after five years he must again go to the money-lender.

Q.—Do you seriously contemplate leaving the *rayat* in his present position of indebtedness?

A.—There is a scheme for freeing service lands which I have tried in the villages. A man comes to me and says he is indebted and asks me what he should do. I call the money-lender; he says, "I advanced much; I inquire what the debtor has paid (the payment is

generally in the form of ½ the crop). Say that comes to 40 per cent. I then find out what the debtor owes, and I tell the debtor to give the money-lender a certain proportion of the crop for a certain number of years. The transaction is then closed and both sides are satisfied. Eventually the agriculturist must borrow again, and if he cannot pledge his land he must pledge his crop.

Q.—But suppose a system in which the money-lender might be told "to make his own arrangements" for recovering his debt within the period of 15 years, the property at the end of fifteen years returning to the original holder. If the debt was not recovered it would be the creditor's lookout. The land would return unencumbered to the original holder?

A.—That scheme has two grave objections. One is that you make the *márwári* a landholder.

Q.—Only for fifteen years?

A.—Then he will not take any interest in the land, because it will go back in the hands of another person; and you take away self-respect from the tenant who is no longer on the land.

Q.—Would the combination of this system and yours do: *viz.*, to settle up the account, strike the balance, and fix the amount which the tenant would have to pay for fifteen years, by the end of which time the account would be closed, and the tenant would not lose possession of the land?

A.—That is the very thing I would advocate. The payment should be spread over a certain number of years, and after that time the land should be free of encumbrance.

Q.—There should be a fixed term of years beyond which the accounts cannot go?

A.—That, I think, should be the *sine qua non*.

Q.—Should it be spread over twenty years?

A.—Five years.

Q.—It would be very heavy to compel a man to pay within this short time?

A.—I think it would be better to spread it over the term of five years.

Q.—Then would you be disposed to absolutely prohibit usufructuary mortgage as was done under the Panjáb Act?

A.—The ordinary usufructuary mortgage does not differ much from simple mortgage.

Q.—Would you go so far as to limit the *rayat's* power of alienation afterwards?

A.—I certainly would. I do not think the *rayat* should be allowed to alienate outside the cultivating members of the village community.

Q.—Would you be disposed to prohibit sale in execution of a decree for mortgage and to allow the money-lender power to keep possession of land for a limited number of years?

A.—I would prohibit the sale. I would not allow the money-lender to keep absolute possession of land, but would give him possession of a portion of the crop in satisfaction of his claim.

Q.—You would allow him a lien on a certain portion of the produce in satisfaction of the claim, and you would limit the time during which such lien should prevail?

A.—Yes.

Q.—Would you be disposed to let your Circle Inspector have full control over the *kulkarnis* with regard to the collection of land revenue and keep land revenue records? At the present time you have two systems in operation. You have one organization for collection of land revenue and another for collecting statistical information. In Northern India we have one system, *i.e.*, one organization, by which both things are managed?

A.—I have not considered that particular point. I doubt if that establishment would be large enough for the work.

Q.—Apart from the question of sufficiency of establishment you are disposed to think that it might be useful?

A.—Yes.

MR. N. G. CHANDARKAR, MAMLATDÁR, AHMEDNAGAR.

The President.—In what capacity did you work?

A.—I worked under the Collector as *mamlatdár*.

Q.—Are you a Ministerial Officer or Administrative? Are you working in the Collector's office?

A.—Yes. Directly under him.

Q.—You don't travel about the country, do you?

A.—Yes, I do.

Q.—What are your functions?

A.—I write out orders.

Q.—Do you inquire into land revenue matters in the interior?

A.—Yes.

Q.—Is Ahmednagar under the Deccan Relief Act?

A.—Yes.

Q.—Is there much indebtedness in Ahmednagar?

A.—Yes.

Q.—I have been told there are two sorts of mortgagees, the mortgagee who has got possession of the lands, and the mortgagee who has not got possession? Is there any unwillingness on the part of the mortgagees to get possession of the holding, or do they prefer to remain as mortgagees?

A.—That depends upon the character of the debtor. If the debtor is a good man the mortgagee does not care to take possession, but if he does not pay his instalments at the proper time then the mortgagee endeavours to get possession.

Q.—Apart from the character of the debtors, is there any inclination on the part of the mortgagees to get possession of the land.

A.—No.

Q.—Are the mortgagees more numerous in your district than the persons who have foreclosed?

A.—Yes.

Q.—Is there a strong disinclination on the part of the cultivators to have their names taken off the register?

A.—They try to keep their names on.

Q.—They don't like to give a *rázináma*.

A.—No. If they do so, they think the Civil Courts will presume that the deed has become complete.

Q.—We have been told that the mortgages now usually take the form of a conditional sale? And you say the tenants strongly object to have their names removed?

A.—Yes; sometimes even when the sales have actually taken place and there is no doubt about it objection is made by the tenants to give up the *rázináma*, they take Rs. 20 or Rs. 25 and then do it.

Q.—Did the *sowcars* during the famine give any assistance to their tenants?

A.—Yes, a great deal. I know examples in which they did much beyond their powers, but for honest tenants only.

Q.—What class of *sowcars* are there?

A.—Bráhmáns, Márwáris, Gujars?

Q.—Was the assistance that they gave their tenants added to the debts or not?

A.—It was written in the *khata* as a debt.

Q.—Did it bear interest like all other debts?

A.—Yes.

Q.—These persons to whom they gave assistance were more or less substantial tenants?

A.—Yes.

Q.—Did they give assistance to others?

A.—Yes, they took it in another form. If they gave Rs. 5 of grain the deed was drawn for Rs. 10.

Q.—So that they gave nothing for nothing?

A.—No. The *sowcars* represented that grain was dear and that when the grain was returned it would be cheaper, so they charged twice the price of grain.

Rao Bahádur Syam Sunder Lal.—Why did not they try another expedient? Instead of entering grain in the *khata*, why did not they enter cash, the value of the grain?

A.—They did do that: it is shown as a cash debt.

DR. NIGHTINGALE, DISTRICT MEDICAL OFFICER, PANCH MAHALS.

The President.—How long were you in the Panch Mahals? Were you there during the year 1900?

A.—Yes.

Q.—Were you there in 1898?

A.—I went there on the 1st of February.

Q.—Were you the Civil Surgeon of the district?

A.—No. District Medical Officer.

Q.—You were constantly on the move?

A.—Yes.

Q.—Did you examine the bazars and the supply of grain exposed for sale?

A.—Yes.

Q.—Did you notice that there was anything defective in the grain supply?

A.—There was in a certain number of cases.

Q.—Was it noticeable?

A.—Yes, it was.

Q.—What was the grain which was particularly exposed for sale?

A.—It varied in different parts of the district. The chief grain was rice.

Q.—What rice was it?

A.—It was Rangoon rice.

Q.—Did the people complain to you about that rice?

A.—They did. They did not like it at first.

Q.—Did the water supply strike you as being very insufficient?

A.—Not at first.

Q.—Did you enquire regarding the depth of the water in old wells?

A.—I did not measure it; but I enquired about a large number of wells. The water was very low. In the villages they had a fair supply.

Q.—Was there any systematic plan of disinfecting wells in villages during the cholera season?

A.—It was done in some *taluqas*.

Q.—Was there any agency through which it was done?

A.—Permanganate of potash was given out to the *mamlatdárs* and they made their own arrangements.

Q.—Did you enquire in the villages as to how these things were done?

A.—No.

Q.—What was the medical staff of the district under your control?

A.—The permanent staff?

Q.—No, the permanent staff, I understand, was under the Civil Surgeon employed on their ordinary duty?

A.—They were not altogether on their ordinary duty.

Q.—When they came under famine work, they came under your control?

A.—I gave them orders.

Q.—Can you say how many Hospital Assistants you had?

A.—I am afraid I cannot tell you.

Q.—Had you a Hospital Assistant for each work?

A.—There was one work without one.

Q.—What was the largest numbers of works opened?

A.—I think it was 7 altogether.

Q.—You cannot say how many Hospital Assistants you had under your orders?

A.—No.

Q.—Had they all got some professional training?

A.—Yes; they all had some training.

Q.—Did you find them satisfactory?

A.—Most of them were not satisfactory; some were good men, but the others were very bad.

Q.—Well, your mortality remained normal up to December and then it rose month by month—9½ in January, 12½ in February, 18½ in March, 21 in April and 54 in May. Then it went down. I suppose a good deal of your mortality in April and May was attributable to cholera?

A.—Yes.

Q.—We have been told that the mortality figures reported for cholera are less than the true ones. Is that your impression?

A.—Yes, very much less.

Q.—Have you any reason for thinking there was a considerable mortality among immigrants?

A.—I could not distinguish immigrants from the others.

Q.—I suppose when people died in the hospitals it could in some way be traced whether they were British subjects or Native subjects?

A.—I do not think so.

Q.—Could you give us an example for a particular month, in which that point was kept in sight, namely discrimination between the British subjects and the Native subjects?

A.—I do not think there was any discrimination.

Dr. M. O'BRIEN, DISTRICT MEDICAL OFFICER, BROACH.

The President.—Which is your district?

A.—Broach.

Q.—Were you there during the whole of the famine?

A.—I took charge on the 29th of May.

Q.—You came in the middle of the pressure?

A.—Yes, it was pretty severe then.

Q.—To what do you attribute the very high mortality?

A.—There are several causes of the high mortality. It was probably due to deaths among immigrants.

Q.—Did you form any idea of the extent to which immigration prevailed?

A.—No.

Q.—Could you form any idea of the number of deaths in the Broach poorhouses due to immigrants, would it be 30 per cent.?

A.—More than that, it would be more than 50 per cent.

Q.—Did you visit any of the relief works and did you observe the water-supply? Was it fairly good?

A.—In a few cases it was slightly brackish. I did not notice that myself, it was noticed by the Chemical Analyst. It did not affect the health of the people.

Q.—Were any attempts made to purify the water with permanganate of potash?

A.—Yes, when there was cholera, not on other occasions.

Q.—Were any arrangements made by which water was drawn from the wells only by particular buckets?

A.—Yes, people were not allowed to use their own buckets.

Q.—We were told that the subordinates were not of a reliable stamp, do you think the mortality in the hospitals might have been due to want of medical care?

A.—I don't think it was due so much to that; the people did not have confidence in them, I found that there was greater mortality at night than in the day.

SIRDAR R. B. VIKARIDAS, NADIAD.
(*Non-Official*).

The President.—Are you a landed proprietor?
A.—Yes.
Q.—In the Kaira district?
A.—Yes.
Q.—Do you cultivate the land yourself?
A.—No.
Q.—Do you grow wheat?
A.—No.
Q.—Cotton?
A.—No.
Q.—Do your tenants grow wheat?
A.—They grow tobacco, jira, bajri and mixed crops?
Q.—Are your tenants in debt?
A.—For the past 20 years they seem to be getting into debt.
Q.—How do you explain that?
A.—On account of the high rate of assessment.
Q.—At what rate does the assessment fall in your opinion?
A.—I suppose 20 to 30 per cent.
Q.—Is it nearer 20 than 30 or nearer 30 than 20?
A.—It would be nearer 20.
Q.—Has there been an enhancement of the assessment lately?
A.—Yes; the sub-soil water rates have been increased.
Q.—Has the sub-soil water been made the ground of increase in other places than where wells exist?
A.—Yes.
Q.—Am I not right in thinking that a well constructed during the settlement is exempted during settlement?
A.—Yes.
Q.—Is your district as fertile as Broach?
A.—The soil of Broach is rather black and the soil of Kaira is sandy.
Q.—Is Broach soil more fertile than Kaira?
A.—Yes.

DR. J. H. WALSCH, DISTRICT MEDICAL OFFICER, AHMEDABAD.

The President.—Have you had long experience of the district?

A.—I came here last June.

Q.—Have you had a long experience of India?

A.—No, about a year or 18 months.

Q.—Do you speak the language of the district?

A.—No.

Q.—Your business was to visit all the relief works and to inspect them from the sanitary point of view, as far as you could?

A.—Yes.

Q.—Had you any assistants for that work or did you trust the hospital assistants?

A.—I only had hospital assistants.

Q.—Had you a travelling staff to inspect the villages?

A.—No.

Q.—Was the character of the sickness that you noticed in the temporary hospitals and on the works such as might be expected in times of scarcity of food?

A.—When I first came there was a cholera epidemic. It started here in May.

Q.—During July and August was there much bowel complaint?

A.—There was some malarial fever.

Q.—Was the condition of the people on the works good or was it reduced or was it fair?

A.—It might have been regarded as fair.

Q.—You did not come across on the works many cases of emaciation?

A.—The condition of the bulk of the workers may be considered better than fair.

Q.—From that you infer the wages paid were sufficient?

A.—I think the people got sufficient wages.

Q.—Did you notice the character of the grain that was exposed for sale on the works?

A.—Yes.

Q.—Did you find bad grain on any substantial number of works?

A.—We usually found one or two cases on each work.

Q.—Were they so numerous as to substantially affect the health of the people?

A.—I do not really think so.

Q.—Did you ever happen to find bad grain exposed in the market?

A.—No, never.

Q.—Was the grain that you saw exposed for sale on the works suitable for the people of the district? I am given to understand that it was Burma rice to a large extent?

A.—I found both country rice and Burma rice in the same shop very often, at least I was so informed.

Q.—Did you find any cheap indigestible vegetables for sale on the works?

A.—No; I never noticed any.

Q.—Did you pay special attention to the water-supply?

A.—Yes.

Q.—On the whole, were you satisfied with the attention paid to the water-supply and its preservation from pollution?

A.—I think it was fairly well managed.

Q.—Could you see in the arrangements of the water-supply any reason for thinking that cholera was due to defective water-supply?

A.—The cholera had already broken out when I came and the water was certainly bad.

Q.—Could that by any arrangement have been prevented?

A.—I do not think so.

Q.—Was the mortality greater among children or amongst adults?

A.—Proportionately, I think amongst children.

Q.—On the works, or do you refer to the villages?

A.—I refer to the works and poorhouses.

Q.—Were you, on the whole, satisfied with the class of hospital assistants that you had? How did they do their work?

A.—Consistently good work was rare.

Q.—Was the supply of hospital assistants insufficient?

A.—We always got them after asking for them.

Q.—Had you under you any native practitioners, the *hakims* of the country?

A.—No, I had not.

Mr. JIBHAI KEWALDAS OF VIRAMGAM.

(*Non-official*)

I LIVE in Viramgam and was there during the famine. Eighteen years ago I bought a village and have spent Rs. 28,000 on it, which includes Rs. 8,000, the purchase price of the village. I have received during these 18 years only Rs. 3,500 as rent, that is net profit. I wish to show that land investments are not paying and that the assessment is high. I spent Rs. 20,000 on the purchase of additional land and the construction of houses and bunds. I spent Rs. 7,650 in assisting my tenants during the famine as follows: Rs. 3,600 on the purchase of an engine and pump, Rs. 650 in digging wells, Rs. 1,300 on *taqávi*, Rs. 100 was advanced for the subsistence of tenants and Rs. 2,000 for fodder. I am a money-lender by profession.

Mr. JAMSETJI ARDESHIR DALAL, FAMINE COMMISSIONER, BARODA.

The President.—Were you engaged in famine relief in Baroda in 1899 and 1900?

A.—Yes, as Famine Commissioner.

Q.—What part of that State was affected?

A.—Its population is 2,415,376 and 2,000,900 were affected in the beginning, but in April and May the whole area was affected.

Q.—Statements have been made to the Commission by various witnesses that distressed people from Baroda State as well as from many other States adjoining Guzerát came into British districts and were relieved here. The statements are that they came, many of them in an emaciated condition and helped to swell the mortality in British districts. That is the view of the case with which the Commission is concerned and probably one with regard to which you might desire to afford some explanation. The broad argument is to the effect that while relief in British districts goes gradually up to 23·6 per cent. of the whole population in Ahmedabad, up to 37 per cent. in Broach, 37 per cent. in Panch Mahals and 28 per cent. in Kaira, the relief in Baroda State never exceeded 4·27 per cent. of the population affected. The inference is either that the distress must have been much less in Baroda than in British districts, or that the relief administered in Baroda must have fallen short of what was necessary, whereby distressed Baroda subjects were forced on to the hands of the British Officers?

A.—In this matter I believe they are two distinct questions and I would like to take them separately. I should wish to draw the attention of the Commission to the four different divisions of our state. One to the south of Surat is Nowsari, another portion is in the heart of Guzerát between Broach and Kaira, the Baroda division, the third is to the north and is called Kari and the fourth is in Kathiawár. I find that in the Kathiawár division distress was greatest and there our percentage was 23 and 25 per cent. There was a want of rain for two years and very heavy scarcity. There our numbers even from January rose up to 23 per cent. and the highest was 26 per cent. in May, so there I have nothing to say as to the paucity of numbers on relief. Coming to Nowsari our numbers are not inferior to those in Surat. For June and July they were 4 and 5 per cent. In Surat in only two months were they 5 or 6 per cent.—July and August. I grant that our numbers might not have been so well chosen or so strictly brought to the works as in British districts. In Nowsari there was very little distress and our numbers compare fairly well with Surat.

As regards Kari the reason our percentage was so low is that we have special facilities for well digging; so much so that in this year 8,500 new wells were sunk, both by advances by the State and by private enterprise. Altogether the expenditure on wells was 12 lakhs and we have something like 38,000 wells. In addition to that the people had sunk small temporary wells obtained by digging just a few feet, which last for a year or two and fill up again.

Q.—Were the new wells *pakka?*

A.—Two hundred at Government expense were and 1484 others and the balance were *kachcha.*

Q.—How low did you find water?

A.—From 12 to 30 feet. The reason why Kari was not so distressed was that it was protected by irrigation from the permanent annual grant: we had 153 *pakka* and 400 *kachcha* wells. That is what the Revenue Department always spends. It is part of the Government's procedure to spend 2 lakhs of rupees for building *pakka* wells every year. We give *takávi* advances also for wells.

Q.—How do you select the wells? You build them as State property?

A.—We have certain arrangements with the holders.

Q.—Do they compete for the making of these wells?

A.—Generally they do.

Q.—How many acres does each of these *pakka* wells irrigate?

A.—Each well irrigates four *bighas*; 1½ *bighas* makes an acre.

Q.—Your irrigation was 30,000 wells, 21,000 *pakka* and 8,000 *kachcha.*

A.—The irrigation is the same for both, only the *kachcha* well does not last so long and costs less.

Q.—You had 160,000 or 170,000 *bighas* protected in that division by irrigation. What is the population?

A.—Nearly 11 lakhs.

Q.—Will that did not support them?

A.—There was a large amount of private charity amounting to 1¼ lakhs of rupees. And then in the beginning of the difficulty an enormous number of trees was cut down and their value was computed at a lakh of rupees. There was a wholesale cutting down of trees, so the sub-soil water let the rough vegetation grow.

Then the population is richer in our *taluqas* than in Ahmedabad and had other resources to fall back upon. We have many big towns there.

Q.—May I ask how many maunds 170,000 *bighas* of food-grain crop will produce?

A.—About 40 maunds an acre—30½ pounds to the maund.

Q.—It works out at 260 pounds per head for the year: ¾ pounds per head per day or 12 *chhataks* a head a day for six months?

Q.—Well now we come to the other divisions?

A.—Yes, the State has certain permanent charities which are given every year whether there is famine or not; these charities relieved during this year 19 lakhs of units, that is a little over 5,000 daily in the Baroda Division.

Q.—What is the population of the Baroda Division?

A.—Eight lakhs.

Q.—Was there any effort made to irrigate in the Baroda Division?

A.—Yes, there were wells sunk everywhere, a portion of the Baroda Division is such that no wells can be sunk, unless at very great expense, in the black soil. Wherever it was possible to sink a well it was done.

Q.—At what time did you commence the policy of sinking wells?

A.—About August and September: we gave $2\frac{1}{4}$ lakhs in August, September and October altogether.

Q.—What was the gross sum you advanced in *taqávi* all over the Baroda Division?

A.—*Taqávi* for the wells in Baroda amounted to Rs. 1,41,000 and the total *taqávi* to Rs. 4,20,000.

Q.—Is there any other point you would like to mention to the Commission?

A.—There were 462 new wells built in the Baroda Division.

Q.—That added to the irrigation facilities?

A.—Yes, that is the first point about the paucity of numbers. About immigration I should like to say that in the neighbouring States we have general immigration in ordinary times. I think in the distress there was a rush for labour. I found the mass were sent back immediately and we received them at once.

Q.—In what month did you receive them back?

A.—In September, they were sent by train to Baroda; they were inhabitants of Kári and we remonstrated, on which they were sent to Kari. They went to Ahmedabad in search of labour, in fact they were permanent wage seekers; they had come to Ahmedabad long since. After that the immigration ceased.

Q.—There were complaints after that?

A.—They were not sent to us officially. The immigration occurred at the beginning of the famine when the people were running wild; they didn't know that works were going to be started.

Q.—Many people were returned from other districts of Guzerát?

A.—Kaira gave none, nor the Panch Mahals, nor Surat: Broach said 5,819 were being sent and when we despatched our men to receive them we got not half that number.

Q.—Where did they go to?

A.—I cannot say. That is how I account for the paucity of the numbers; perhaps they were miscalculated at first. There was another demand, the Collector of Broach wrote in September 1900, to say that there were 857 men on relief works, but we could only get 21.

Q.—Perhaps they were not willing to go to you?

A.—Perhaps the numbers were miscalculated. People from other Native States said they were from Baroda, only in order to be packed back to Baroda. About Broach and the immigration of these 5,819 men in March, I found that many of our works were depleted because there was a rush to Broach, not because we hadn't our works on the frontier, but the conditions were easier at Broach: when they became strict in Broach there was no immigration for six months.

Q.—What were the conditions on your works compared with Baroda?

A.—We took stricter measurements on works than in Broach, and the payment there was also more.

Q.—The payment of wages was more?

A.—Yes, I don't mean to say that Baroda was very hard, but Broach was rather lax in regard to the taking of measurements.

A.—Have you got the numbers of men on relief works in the Baroda Division alone month by month?

A.—Yes.

In	September	16	works and	...	...	...	...	22,000 units.
„	October	33	„	...	...	...	...	42,000 „
„	November	59	„	...	...	...	...	262,000 „
„	December	54	„	...	...	...	...	442,000 „
„	January	46	„	...	...	...	...	365,000 „
„	February	34	„	...	...	...	...	354,000 „
„	March	33	„	...	...	...	...	448,000 „
„	April	16	„	...	...	...	...	601,000 „
„	May	23	„	...	...	...	...	427,000 „
„	June	21	„	...	...	...	...	411,000 „
„	July	27	„	...	...	...	...	510,000 „

Q.—Were these works in the nature of village works or Public Works?

A.—They were of both sorts.

Q.—Did you have village works from the commencement?

A.—Yes.

Q.—For what area did you supply a work?

A.—Wherever there was pressure we opened a small work.

Q.—Did you conduct your works through village agency or by State agency alone?

A.—By State agency alone.

Q.—You didn't try village agency?

A.—No; it was a new thing to us.

Q.—You say the terms in Broach were easier than in Baroda. Did you hear that the terms in Broach were made a *little* stiffer later on?

A.—Yes.

Q.—Did that increase the numbers on your works?

A.—No.

Q.—I find there was an increase?

A.—Then it must be so. I don't know: when rates were reduced in Broach, they must have come back. I cannot say how many emigrated. I know we had a tank at Baroda on which 3,000 were employed, and I heard that the numbers had suddenly gone down 60 per cent.; I found that they were going to some big work in Kaira or Broach. The able-bodied persons went away and the weakly remained. The terms at Kaira or Broach must have been easier than ours.

Q.—Are you inclined to think that the increase of your numbers in April was caused by the reduction of the rates in British territory?

A.—Yes.

Q.—Did the people who had gone away return in April?

A.—No, not then.

Q.—Let us look at the converse. Was there any immigration from British districts to you?

A.—Yes; no less than from our territories to British. The Chief Engineer reported, on my enquiry, that on the 18th of December, in one week, there were 700 foreigners in the *taluqa* of Daya near Ahmedabad.

Q.—Would these foreigners be presumably all British subjects; how many British subjects had you in January?

A.—In the middle of January there were 181; in February 130; in March 113; in April 118; in May 115.

Q.—These are insignificant numbers; your evidence shows that while the influx of British subjects into Baroda from January to May was insignificant, there were several thousands of Baroda subjects in British territory. Can you give the numbers on relief works in April?

A.—No; I could not. In one of our orphanages 40 children from British territory came in one day.

Q.—Would you like to add anything else to your evidence?

A.—We had a large number of British subjects in our poorhouses. I found in the Kari Division, on the 7th of June 1900, as many as 1,100 foreigners, out of whom about 700 were from British territories.

Q.—Could you say how many British subjects there were in the whole of your poorhouses on any day in June?

A.—No.

Q.—Did you make a census?

A.—In the State poorhouses of Baroda, on the 27th of October 1900, there were 255 foreigners, of whom 152 were British; 36 from Ahmedabad; 20 from the Panch Mahals; 85 from Kaira and 11 from Broach.

Q.—Was there anything regarding attractiveness of the British currency which induced people from Baroda to come to British territory?

A.—Yes; British currency is more valuable.

Q.—Had you any complaints regarding the railway carriage of fodder?

A.—Yes; they could not carry all our grass to the Kari Division; there was a block owing to the change of gauge. I think the staff did their best, but they could not get waggons.

Q.—And the cattle suffered in that way?

A.—Yes.

Q.—Had you great mortality of cattle in Baroda?

A.—Yes.

Q.—Have you made out any estimate of the percentage of cattle that died?

A.—Fifty per cent. died in Kari which suffered most.

Mr. Nicholson.—When did you take a census of the cattle?

A.—Monthly lists were supplied by *mamlatdars* and these calculations were made from them.

Q.—Is that a regular feature of the famine administration?

A.—It was done for this purpose alone.

Q.—Have they been tested by superior officers and have typical villages been taken?

A.—No.

Q.—I believe an Agricultural Bank has been started?

A.—Yes; but it is a branch of the old one.

Q.—What is the principle on which that particular bank is started? Is it a joint-stock bank?

A.—We tried that; but for the present the State is the proprietor.

Q.—The capital is Rs. 25,000?

A.—Yes.

Q.—At present no one has taken shares but the State?

A.—There have been no demands for shares.

Q.—Your object is to bring in the public and for the State to retire from it?

A.—Yes.

Q.—Will the State retire absolutely?

A.—Absolutely, afterwards.

Q.—Are there articles of association?
A.—Yes.
Q.—And the Bank has published a report?
A.—Yes.
Q.—You were able to make advances for fodder?
A.—Yes.
Q.—Did you give these advances to the ordinary cultivator?
A.—It was intended for aboriginals.
Q.—Have you collected any of the outstandings due?
A.—They have not yet fallen due.
Q.—Have you not made a large profit?
A.—Not this branch.
Q.—Surely there is such a bank which credited Rs. 3,000 to reserve?
A.—I have no information.
Q.—Do you think it would be possible to extend the system?
A.—Yes.
Q.—How will you do it?
A.—We will establish it in the chief cities of the *taluqa*.
Q.—From them you expect to extend branches?
A.—Yes.
Q.—And bye and bye you expect these branches will become autonomous?
A.—Yes. This is only an idea at present. I shall send in a copy of the rules.

Rao Bahadur Syam Sunder Lall.—Was there an import of grain from outside to these divisions of Baroda, especially Kari; those in which you had a large number of wells?

A.—The total imports amounted to 56 lakhs of Bengal maunds, and the total exports to 6 lakhs.

Q.—What is the population?
A.—Kari 11 lakhs; Baroda 8 lakhs.

The President.—Can you give the Commission any advice as to how immigration should be dealt with by the British Government on the one hand and by Native States on the other?

A.—As regards the Baroda State, the British Government should send back the men and charge the amount for feeding them, or should keep the people unless they went in very large numbers. That would do as regards Baroda; but there is an influx of men from Marwar and other States.

Q.—The difficulty is that you must find out in the very beginning that a person has come from a particular State; because when they know what you are seeking they conceal the place of their origin?

A.—I must say I don't think it is quite so; a man could be found out in no time.

Q.—If a large work were opened in British territory, in which people came in large numbers, you cannot exclude them. If they perform the tasks, they are admitted. How are the Public Works Officers or the British Government to correctly find out where 10,000 or 15,000 men came from?

A.—One could send for the village officials of the place from which they came?

Q.—You may find out a few cases, but how will it be possible in regard to several thousands to find out that they are British subjects on Baroda works or Baroda subjects in British territory?

A.—It is very difficult.

Q.—Is there any means of dealing with the question on the basis of not making these enquiries. They cannot be refused admission if they come in an enfeebled state of health, and it is difficult to find out where they come from?

A.—Nothing occurs to me to suggest.

Q.—Tickets or passes might be given by the *patels* before hand; but that might not work: men might lose their passes, and that would lead to abuse when the people were inclined to deceive. Could there be anything like the establishment of relief works in the Native States and on the frontier or on precisely the same terms as regards pay and all other arrangements as in British territory, so that there would be no inducement for the people to move about?

A.—We have tried to model our code on the same lines as the British code.

Q.—Am I wrong in saying that your famine arrangements are on a little stricter basis than the British?

A.—Our tasks were, but our wages are a little better. We never pay less than 14 *chhataks*.

Q.—Do you pay 14 *chhataks* to everybody whether he works or not?
A.—Yes; it comes to that.
Q.—Do you think many people did more than the minimum wage?
A.—No; they stuck to the minimum wage.
Q.—You have not got the system of payment by results in Baroda?
A.—Yes; in this way that the State system was to divide the people into two classes; they were told to do a certain task work and they could earn up to the maximum, but if they fell below the minimum wage we never gave them below the minimum.
Q.—I understand you to say that, as a rule, they did not earn more than the minimum wage?
A.—No.
Q.—Did you find that they did work to entitle them to the minimum wage?
A.—No.

Q.—Then you have got the Code-task system with a minimum wage and the majority did nothing but the minimum wage?

A.—Yes.

Q.—Then I am surprised you did not have the whole of the British population on your hands. If another famine should occur the complaint will be from Baroda of British subjects coming into their territory and not of Baroda subjects coming into British territory. If there is no assimilation of systems and payment on both sides of the frontier the people will gravitate towards the side on which they get easier terms?

A.—In our relief works payment is much stricter than on the British.

Q.—Why did they go to Broach when there was a minimum wage of 14 *chattaks* in your territory? The minimum wage in Broach is 12 *chattaks?*

A.—I don't see why they should have gone to Broach.

Q.—They had the currency advantage?

A.—Yes; and the works were nearer to their homes and more permanent.

Q.—Was there any expectation that the measurements would be easier in British territory than in their own?

A.—Yes.

Q.—Have you got your death-rates? What were they for the Baroda Division bordering on Broach?

A.—January 4,022; February 3,519; March 4,216; April 4,364; May 10,661; June 8,473; July 8,887.

Mr. Nicholson.—Did you in admission to works have the principle of selection in Baroda?

A.—Yes.

Q.—Did you admit only your own people by ticket or did you admit anybody who came?

A.—We admitted anybody who came.

[*The witness subsequently wrote*].

I have the honour to forward to you, in a separate cover, the information which the Honourable Mr. Nicholson required about the Agricultural Banks in the Baroda State. I may say that though we have opened only a few Banks, it is likely that they will be increased and developed.

2. The Famine Report of the State, as hitherto compiled, is only a preliminary and incomplete one, up to the end of July 1900. I am engaged in collecting materials for a final and complete statement of the operations.

3. Taking advantage of having to address you now, I beg to state that I find the report of my evidence, as published in the Bombay papers, to be not full and accurate. The *Times of India* in its issue of Friday, the 8th instant, is more lengthy than the other Bombay papers; but there is much confusion in mentioning the boundaries of our four divisions, and there is no mention at all about the immigration in our State from the British and other territories and about the question of future arrangements.

4. I would also take this opportunity to make myself more clear about the relative staying power of Ahmedabad and Kari districts. Many of our large towns in the Kari Division have more substantial bankers and richer people than the towns of the neighbouring Ahmedabad district, excepting, of course, the city of Ahmedabad, which is far and away superior in wealth and industry to any of our Kari towns. But, tract for tract, the soil in the Kari Division is superior to that in Ahmedabad; and in the former there are more irrigation wells than in the latter. In the former, in addition to 30,000 old wells, there were made 8,772 new wells, and 4,000 *dhekudis* (lasting for one season only); while if my information is right, there are less than 15,000 wells in the latter. I would consider that one well would irrigate three to four acres, and that one such acre would produce about 40 Guzeráti maunds, or 1,600 pounds of food-grain, not calculating the fodder.

5. In speaking of the emigration of men from Baroda Division to Broach district I would beg to say, in addition to what I have already said, that the larger numbers must have been from other Native States and from the Kaira Division, as we had ample works to serve all our Baroda people. I would, if I am allowed to do so, beg further to say that I find the Kunbi population in Baroda Division to be about 17·5 per cent. and only 7·5 in Broach district, while the forest tribes population in our Baroda Division is only 7·5; and so high as 31 per cent. in Broach. In the Baroda Division also there are 4,800 irrigation wells, drawing on an average five *kos*, against 723 wells, as I am informed, in the Broach district. I believe this will tend to show that a large number of its own population wanted relief badly in Broach. My opinion of this is confirmed when I find so many as from 70 to 75 thousand people (22 per cent.) relieved there in July and August, by gratuitous relief in villages. No outsiders could have passed off as British subjects in the villages of Broach, when relief was given to the villagers. This will show that the relief required by the people of Broach itself was not inconsiderable; and if the numbers were large in March and April (which after all were smaller than those mentioned above), they need not necessarily have been due to emigration from Native States. The high death-rate in Broach, notwithstanding the large numbers relieved, may probably be explained by the high percentage of the Broach population on relief rather than by an allegation of people from districts better off like Baroda going there to die.

6. I beg to send herewith printed statements of the emigrations from Baroda, as officially reported to us, and the immigrations into the Baroda State from the British and other territories, as found from enquiries made at different times.

MAJOR T. E. DYSON, DEPUTY SANITARY COMMISSIONER.

Mr. Bourdillon.—You are the Sanitary Commissioner of Gujrat?

A.—Yes.

Q.—What is exactly the extent of your charge?

A.—Five districts of Gujrat and the Native States—practically the British part of the Northern Division excluding the Thana district.

Q.—How long have you been in that charge?

A.—Eight years.

Q.—You know Gujrat thoroughly?

A.—Yes.

Q.—What is the system of collecting the statistics in ordinary years?

A.—They are registered in the villages by the *patel* of the village if he is able to write and read or by the village *talâti*. Then they are sent monthly to the *mamlatdâr's* office and from there on to my office.

Q.—Do they go through the Collector or through the Civil Surgeon of the district?

A.—They come directly to me from the *mamlatdâr's* office.

Q.—When does the Collector or the Civil Surgeon see them?

A.—I send the Collector quarterly returns from my office.

Q.—No copy goes to the Collector?

A.—No.

Q.—Unless he calls for them he does not see them?

A.—Not that I am aware of.

Q.—Are those monthly returns published in the Gazette?

A.—They are not.

Q.—The number of births and deaths is not published?

A.—No.

Q.—When the famine operations began, was any special arrangement made for testing deaths and births, and reporting them? Were special officers appointed by you?

A.—I instructed all the vaccinators to send any returns from villages where they found the death-rate was going up. That was only for my own office.

Q.—They were not formal returns?

A.—No.

Q.—Then the District Medical Officers—were they not under you?

A.—Not at all.

Q.—Directly under the Deputy Sanitary Commissioner?

A.—Under the Sanitary Commissioner.

Q.—Had you any duties in connection with those?

A.—In September and October I was practically the District Medical Officer in Ahmedabad and travelled during October and November in the Panch Mahals.

Q.—To satisfy yourself or for the information of the Sanitary Commissioner?

A.—Yes; for the information of the Sanitary Commissioner.

Q.—To see the state of the works?

A.—To test the reports and to see what sanitary arrangements were made.

Q.—And in case of outbreaks of cholera were they brought to your notice?

A.—They were reported to me after the Collector.

Q.—We have seen from the returns sent to us what the worst districts were and what the death-rates were; they went up steadily till about the end of April and May?

A.—Well, I think we should divide the total death-rate of the year 1900 into three periods. (1) the first 3 or 4 months before the cholera broke out, *i.e.*, up to April; and (2) from then until cholera practically ceased that is in July; and (3) the period after the cholera ceased. During the cholera period we had a high mortality.

Q.—Up to the end of 1899 the death-rate was low?

A.—Yes; it began to rise during January, February, March and some portion of April.

Q.—There was no special fever?

A.—Nothing.

Q.—To what do you attribute the mortality in this period?

A.—I attribute that to famine. I sent in a report about the mortality in those months.

Q.—Do you think that in Gujrat too little gratuitous relief was given and consequently the people ran down?

A.—Yes; I believe so. I put that as a possible explanation of the very high percentage of mortality at that time.

Q.—At the end of May gratuitous relief was very liberally given; but it has been suggested that when people have once run down very much gratuitous relief takes a long time to restore them again to their original health?

A.—Quite so.

Q.—Then you think it is a fair description of the state of things to say—insufficient gratuitous relief and the cholera outbreak were the causes of the increased mortality during the hot weather?

A.—Yes.

Q.—Did you get the death-rates by classes and castes of the people?

A.—Yes.

Q.—Was it true that during the autumn all classes suffered ?

A.—I think so.

Q.—It was an unhealthy autumn ?

A.—Very unhealthy and in the hot weather too all classes suffered largely.

Q.—As to the death-rates it has been suggested that the rates are entirely upset by the immigrants? Have you been able to get any statistics for the various districts that you can rely upon ?

A.—I started an admission book. In Ahmedabad city a fair estimate has been made of the number of deaths among outsiders. One-third of the mortality occurred amongst them.

The President.—You differentiated between British and Native subjects ?

A.—No. We have no figures referring to that ; but I have watched and made enquiries in the poorhouses and hospitals and I should say 30 per cent. of the deaths would be an under-estimate of the numbers of foreigners who died.

Q.—Have you tried to get the information in any other way by comparing the sexes of the dead ?

A.—I am afraid the figures are not reliable.

Q.—I have got the figures supplied by Dr. Clarkson. I have taken these figures for the affected districts for Ahmedabad, Kaira, Panch Mahals and Broach. I will tell you what the proportion is—out of a 100 deaths in Ahmedabad 56 per cent. were males, in Kaira the number was 60, in the Panch Mahals 63. Does that suggest to you that there was a large number of immigrants ?

A.—In a place like the Panch Mahals I think it probably does indicate considerable immigration.

Q.—A large proportion of immigrants would have died on the road side ?

A.—They probably died on the road side.

Q.—In the Central Provinces the Sanitary Commissioner told us that about 50 per cent. of the deaths were the deaths of children and in this province it does not work so high as that ?

A.—The deaths of children were a good deal below that.

Q.—Had you any occasion to compare your own deductions in regard to causes of mortality with those of other officers ? Did you ever speak to private practitioners or examine their books in regard to the causes of this high mortality ?

A.—No, I did not.

Q.—The mortality went on increasing. I understood you to say that the effects of the insufficient distribution of gratuitous relief extended through the rains up to the end of the famine. Am I clearly to understand that the effect of the inadequate distribution of gratuitous relief up to May has affected the mortality statistics for June, July, August and September ?

A.—I do not think it continued to the same extent. The people even in receipt of relief on the relief works were in a great measure debilitated.

Q.—And the adverse climatic causes acting upon the villager's constitution produced this great mortality ?

A.—I think so.

Q.—The previous pressure to which they had been subjected produced this debilitated state ?

A.—Yes.

Q.—Were you satisfied with the general organization of the Medical Departments under your control ? Had you sufficient officers ?

A.—Under my own control I had only a few officers in the Surat district.

Q.—Had you any direct control of the sanitary organization in the four distressed districts ?

A.—They were under the Sanitary Commissioner ; the District Medical officer in each district controlled the sanitary measures on the relief works ; but they were mainly under the control of the Sanitary Commissioner.

[May I just say one or two words about the treatments of the new-comers on the works. I would offer a suggestion that instead of abolishing fines in the case of new-comers on the works they should be given lighter task. I did not understand from the evidence given that the people were told they would not be fined. They found it afterwards when they were paid. No doubt a considerable proportion of the new-comers were given a task which they were unable to do and not knowing they would not be fined they attempted to do it and suffered.]

Q.—Do you think that the scale of wages laid down in the Famine Code and upon which you acted was adequate to maintain people in good health, if they came upon the works in a fair condition ?

A —I think so.

Q.—That is the scale of 19 *chhataks* for a digger, 15 *chhataks* for an adult woman or man, not a digger, and 10 *chhataks* for a working child, a child between ten and fourteen. Do you think that scale sufficient or do you think it in any way excessive ?

A.—I think it is sufficient.

Q.—Do you think that 15 might be reduced to 14 in the case of working women and men not engaged on digging. Under the old scale it was 14 for men and 13 for women. Under the recommendations of the Committee of 1898, the scale for both was made 15 *chhataks*. Do you think 15 *chhataks*, might without injury to the health of the people, be reduced to 14 *chhataks ?*

A.—As they work largely here in families, I do not think the reduction would be injurious.

Q.—Would you be disposed to maintain equality in the wages of men and women in that class—namely, the 14 *chhataks ?* Do you think that a woman requires 14 *chhataks* or would it be right to revert to the old scale of 13 *chhataks ?*

A.—I should think that was sufficient.

Q.—At all events 14 *chhataks* is ample ?

A.—Certainly.

Q.—Would you be disposed to raise the allowance of the working child to 10 *chhataks* or do you think 8 *chhataks*, which was the former allowance, is sufficient for a working boy between 10 and 14.

A.—I should think it ought to be raised.

Q.—Did I understand you to say that when people came on the works they were not able to earn the full wage. Was that what you meant to convey ?

A.—Yes.

Q.—When people came on the works in rather an enfeebled state and not able to do the full task and strove to earn the full wage—you consider that that overtaxed their strength and prevented them from pulling up?

A.—I would have a lighter task for them.

Q.—Do you think that the tasks, such as you saw, were beyond the capacity of the people to perform. We had a discussion with the engineering authorities in which the question of the tasks was considered. I am not quite certain that at the beginning we understood each other ; but as it comes out it is this : that the task for ordinary earth, ordinary clay, not stiff clay, is fixed under the Bombay Code at 120 cubic feet ; a digger has to dig 120 cubic feet and certain carriers have to remove that 120 cubic feet. The number of carriers is settled by a certain formula, which is difficult to apply in all cases ; but as a rule, it has been reduced to this, namely, that the carriers and the diggers will be all considered as both digging and carrying and the digging and carrying task of a male digger is to be 71 cubic feet and the task of the carrier is to be 47 cubic feet ?

A.—I think they are fair.

Q.—The task, as I understand, is fixed on the assumption that a woman has to travel 9 miles a day carrying a weight for the outer journey and returning empty handed. Do you think 9 miles a day is a fair task for a woman in ordinary fair health ?

A.—I should think so.

Q.—In the large camps which went up sometimes to 10,000 or 20,000 people was there an adequate allotment of hospital assistants for so many workers ?

A.—None at all.

Q.—So that in some cases the hospital assistants were overworked ?

A.—They were in many cases. Their was one hospital assistant on a work of 30,000 people.

Q.—Did that last long ?

A.—It had to be changed when the cholera came.

Q.—When cholera broke out it was a hopeless business?

A.—Absolutely.

Q.—We have been told that the stamd of hospital assistants was not such as you could wish in all cases. You had to get men as best as you could ?

A.—Yes.

Q.—Did it ever occur to you under those circumstances where the staff of hospital assistants ran short that native practitioners might with advantage be employed ?

A.—No, it was never tried. It did not occur to me. In reference to this I would suggest that a special man should be appointed as a sanitary officer. There should be a special sanitary officer.

Q.—What do you say to this system by which a civil officer in charge of the work, of a sufficiently good stamp, be able to direct generally all the hospitals ?

A.—That civil officer should be a sanitary officer too.

Q.—Well, he may be a sanitary officer. The sanitary work is very simple. It is reduced simply to keeping the camps clean and looking after the wells and that should be the business of the officer in charge of the work ?

A.—His time is largely occupied in the morning in receiving new-comers.

[*The witness subsequently wrote :—*]

In the second last question on the first page of my evidence there must be some mistake. Cholera in Gujrat broke out in the hot weather* and had ceased before the autumn and therefore could not influence the autumn mortality, and I certainly never gave an unqualified affirmative to a suggestion that insufficient gratuitous relief had any direct relational cause with the increased autumn mortality.

2. My contention was that insufficient gratuitous relief in the early days of famine started the old, helpless and weakly on the downward grade from which the later liberal extension of relief was unable to recover them before epidemic disease and ordinary climatic diseases overtook and swept them away.

3. The remainder is in the main correct, but there are omissions of question and answer which produce breaks of continuity.

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* NOTE : - Autumn was a misprint for hot weather, which has been substituted.

Mr. DESAI TRIKAMLAL RANCHODLAL, HONORARY SECRETARY, SARVAJANIK FAMINE FUND, AHMEDABAD.

The President.—You have got a private poorhouse ?

A.—Yes. We saw so many people wandering about that we considered some organization should be established. Many people did not like to go to the poorhouses on relief works : they said much of the money was misappropriated : they came to our poorhouse.

Q.—Did you give more than the famine wage ?

A.—Slightly more than the Government poorhouse ; that was simply in order to provide them for a day or two.

Q.—What was the mortality in your poorhouse ?

A.—It was 38 altogether for April.

Q.—Out of how many ?

A.—One thousand six hundred and fifty-two, and many of those who were very ill were transferred to another poorhouse. We hadn't completed the hospital : the men were passed on after being kept three or four days.

Q.—It was a depôt in which you received wanderers till they were passed on ?

A.—Yes.

Q.—Where did you get your funds ?

A—I got Rs. 4,100 from the people and Rs. 600 from Government.

Mr. Bourdillon.—Are you in favour of employing non-official agency ?

A.—I think it would be better if in villages more non-official agency was instituted.

Q.—Do you think it would come forward ?

A.—Yes, I think the people would come forward to serve.

ABSTRACT OF EVIDENCE VOLUNTEERED BY MR. JIWANJI LIMJI BHAI.

(Non-official).

1. Preceding bad years.
2. Large *versus* small village relief works. Small village tank works most important but not executed.
3. Local charities ought to be distributed with the help of respectable villagers and the local board members of the groups of villages they represent.
4. Payments ought to be made daily, as the weekly payments force relief workers to buy grain on credit for which they have to pay 15 to 25 per cent. more.
5. Suspensions and remissions. My own case as a cultivator.
6. Incidence of assessment.
7. The oppression of subordinate officers in recovering revenue in bad years.

[*The President addressing Mr. Jiwanji Limji Bhai said* :—]

If you had come yesterday, at the time appointed for you, we should have been able to give you more time than we can possibly give you now. But any disadvantageous results which might have followed have been obviated by your goodness in making out a statement of the points on which you desire to give evidence. The first point is the preceding bad years. On that point we have had adequate evidence and we know precisely what the circumstances were, which led up to the famine which has afflicted the country. On the second point, namely, large *versus* small village works, you say the latter are most important but have not been executed. I think the sense of the evidence that has been recorded here attaches full importance to the necessity of small village works at certain periods of famine relief administration. On the third point, the effect of the evidence has been to point out the desirability of associating non-official agency of all sorts with the Government officers in the administration of relief. Nothing but good can come from such an association. As to the fourth point, the evidence is entirely in favour of views which you express. The fifth point has also been fully considered and it is a matter which will engage the serious attention of the Commission. As to the incidence of the assessment, that is also a matter which we have fully inquired into, and on which we have secured official and non-official views. The evidence is ample to enable us to form an opinion. Your seventh and last point, namely, the oppression of subordinate officers in recovering revenue in bad years, is a matter which does not come within the mandate to the Commission.

Mr. H. O. Quin, I. C. S.

Answers by Mr. H. O. Quin, I. C. S., to the questions drawn up by the Famine Commission.

1. I did not take charge of the Kaira District until 15th September 1899, and was therefore not personally acquainted with its condition before the failure of the rains. I have, however, been given to understand that the outlook was in no way abnormal except in a few villages of the Mátar Táluka, where a succession of bad seasons had been experienced. I am unable to supply any definite information as to the character of the harvests in the two preceding years, but I believe they were up to the average.

2, 3, 4, and 5 are questions involving statistics, which can be more accurately supplied by the officer at present in charge of the district.

Preliminary Action.

6. The necessity of relief was assumed from the fact of crop failure, but relief measures were not introduced until people were found to be resorting to the test works which were opened in September.

7. The observed facts which led me to think that the machinery of relief should be set in motion were chiefly—

(1) The absence of field work and other employment for unskilled labour.

(2) The knowledge that a large proportion of the population had no food stocks in reserve.

(3) The demand for work.

(4) The absence of fodder and the wretched condition of the cattle, who were being fed largely on the leaves of trees.

(5) The high prices of grain.

8. The first relief measures undertaken were the test works which were opened in various parts of the district. The works were all tank excavations. The test works were followed by large works under the Famine Code, and these were at first metal-breaking and roads. The extent of the distress was gauged partly by the numbers coming to the works in different localities, and partly by the reports received from the táluka and village officers. The only provision of the nature of a self-acting test was the rate of wages, which at first was that usually given for similar work when prices are normal. I would, however, remark here that all subsequent experience showed that the number of persons coming to test or relief works was not at all a satisfactory measure of the extent or intensity of the distress. Throughout the famine, until perhaps the month of July, when the prospect of a second failure of rain rendered the situation desperate, the difficulty in the Kaira District was, not to keep away from

the works people who had no need to be there, but to induce the attendance of persons whose need was of the direst. This state of affairs, the existence of which was only discovered by experience, is so important a feature of the Kaira famine that I desire to give it prominence at once.

9. (*a*) Lists of relief works were ready, but of course they had to be supplemented as the famine developed. The works on the list were for the most part actually located and for several of them surveys and estimates of cost had been made out beforehand. The majority of works actually undertaken, however, were not on the lists, which were ready and plans and estimates for them were not in existence.

(*b*) The relief programme did not include scales of establishment necessary to meet any emergency. Lists of candidates qualified for famine service were not, so far as I am aware, kept up in the Collector's office, or any office in the district.

10. The relief programme contemplated large public works as the backbone of the relief system. No programme of village works was ready in reserve from the beginning.

11. As I am unable to refer to dates I cannot reply very exactly to this question. Test works were the first measure of relief. Kitchens on works were established soon after the large works succeeded to the test works. Poor-houses were, I think, opened about the same time as the works-kitchens. Village kitchens were not opened until the rains of 1900. The organization of private charity in towns, of which, however, there was very little that could be influenced, was attempted as soon as gratuitous relief in villages was begun. There are no Government forests in the Kaira District.

12. (*a*) For the arrangement of village relief a staff of Circle Inspectors was introduced, I think, some time in November. The number of these Inspectors was subsequently increased, so that each had in his charge some 12 to 15 villages, all of which he was ordered to visit at first once a fortnight, and when the distress increased later once a week. Each táluka was divided into three sections, one in the charge of the Mámlatdár (who was also responsible for the administration of the whole táluka), and each of the others in charge of a Special Head Kárkún. These three officers moved constantly about their sections, supervising the work of the Circle Inspectors and the Village Officers and reporting their proceedings weekly in diaries submitted through the Sub-Divisional Officers to the Collector.

(*b*) I do not understand what is meant by the local employment of labour. Except in and near a few of the towns and large villages there was practically no work to be had except that provided by Government. The field labour required in lands cultivated by well irrigation did not give employment to many people outside the members of the cultivator's family.

(*c*) The organization of local charity was in the hands, first, of the Sub-Divisional and Táluka Officers and subsequently of the Táluka and District Committees formed in connection with the Charitable Relief Fund. I am unable now to give the date of the formation of these committees. Before they came into existence, however, small informal committees were to some extent regulating the distribution of charity in the Táluka Head-quarters and other towns or large villages. As a matter of fact, the springs of local charity very soon dried up, and it was most noticeable that everywhere the people were more than ready to allow the needy to be relieved entirely by the measures devised by Government.

(*d*) For the observation of the general condition of the people, the system of local inspection and control was the same as that described for the arrangement of village relief. Until about June there were only two Sub-Divisional Officers (an Assistant and a Deputy Collector), but after that the establishment was increased sufficiently to allow of each táluka being placed in charge of a gazetted officer. Under these officers worked the Mámlatdárs, Head Kárkúns, Circle Inspectors, and Village Officers. From the Circle Inspectors upwards every officer submitted a weekly diary either to the Sub-Divisional Officer or to the Collector (many going on to the Commissioner), and from the beginning special orders were issued that the condition of the people was to be attentively watched and carefully noted in diaries and reports.

13. Loans were issued, I think, from about November onwards, but almost entirely for the construction or repair of wells or the purchase of ropes and bags for working them. I regret that I am unable to give any figures. The class of persons to whom they were issued was the fairly well-to-do cultivator. The loans issued at the outset were, I think, recoverable in whole, though this provision may have been modified by subsequent orders of Government.

14. Throughout the greater part of the Kaira District irrigation wells can be made and large numbers of them exist. These were added to largely during the famine year, and more wells were worked then than at any previous time in the recorded history of the district. The average depth below the surface of water at the end of the rains of 1899 varied, I should say, approximately from 30 or 40 feet in the central portion of the district to 80 or 90 feet in the villages on the Mahi. In the Mátar Táluka the subsoil water is brackish and wells are not numerous. The digging of wells was everywhere encouraged as much as possible by loans, and they were successful in every way. The loss of plough cattle would have been far heavier had there not been increased cultivation under wells, as many cultivators kept their bullocks alive by raising a series of fodder crops all through the months from November till June. Wells were not of much use in securing the crop on the ground, because the

people refused to give up hope of rain and allowed the crops to wither before they began to irrigate them. Probably much might have been done in this direction had the cultivators realised earlier that the rains had actually failed. The same conduct was noticeable when the later rain failed at the end of the monsoon of 1900. Most of the wells constructed will undoubtedly be permanent improvements. As a temporary measure to employ labour, I do not think the construction of wells can be advocated. The amount and cost of the unskilled labour required for the earth excavation are very small, and employment could not be found for any large number of people. I might instance the case of a well in regard to which His Excellency the Viceroy was much impressed by the fact I am now alluding to. At the new Orphanage of the Methodist Episcopal Mission at Nadiád His Excellency inspected a well, the earth work of which had cost Rs. 20 only, while the full cost of the completed well was estimated at Rs. 500 or Rs. 600.

15. Labour was the first criterion of the need for relief and the first test works undertaken were ordinary works under the Local Boards. They consisted chiefly, if not entirely, of tank excavations, *i. e.* the deepening and enlarging of existing village tanks. They were conducted under the supervision of the Táluka Officers assisted by the Local Fund Overseers. The services of the Village Officers were also availed of.

16. On test works no tasks were exacted. The system was one of piece-work, pure and simple, and no consideration was given to sex or to previous occupation.

17. Payment on test works was in strict proportion to results. There was no maximum or minimum wage, no rest-day allowance and no allowance to dependants.

18. Test works were converted into regular relief works when the increasing numbers made it evident that distress on a large scale was inevitable and when the reports from subordinate officers shewed the absolute necessity of providing employment for large numbers.

Large Public Works.

19. Large public works were first opened.

20. The works were under the control of the Public Works Department. I am not in a position to say whether the scale of supervising establishment had been prescribed in advance. The establishment for the first few works was ready, but subsequently considerable difficulty seems to have been experienced in this respect, and the opening of some of the works was consequently delayed. On the whole, very little inconvenience was caused by lack of tools and plant, as large quantities were quickly made available.

21. The division of works into charges was a Public Works matter, and the maximum number of workers which could be accommodated on each

work was determined by the Executive Engineer. The maximum was exceeded in a few cases owing to unexpected rushes, and pressure was then relieved by opening new works in the vicinity or by drafting to existing works on which there was accommodation available.

22. I am unable to give details as to Public Works establishments. Arrangements had been prescribed beforehand for hutting and sheltering and all the other matters specified in this question.

23. No system of selection was attempted at the commencement. No distance test was insisted on. An endeavour was made to compel residence on the works, but it was not successful, and was practically given up after a short trial As remarked above, the great difficulty in the Kaira District was to induce the needy to come to the works.

24. Apart from considerations of drafting labourers from one work to another, I do not think any large public work would serve an area larger than about 16 square miles. The experience of this famine showed that the great majority of the people on any work came from villages within five or six miles distance. A certain number of course came from distances amounting to 15 or 20 miles, and a few from perhaps 30 or 40 miles, but the bulk of the distressed population refused to move far from their homes. How this would be in the event of a second famine it is not possible to say. Conceivably, now that the Kaira people are familiar with relief measures, they might make more of an effort to take advantage of them.

25. Officers of the Public Works Department were entirely independent of the Civil authorities in all professional matters. As regards all questions relating to the works as relief measures, *e. g.* system, rates of wages, frequency of payments &c., the Public Works Department was understood to be subject to the orders of the Civil authorities, but as a matter of fact in the Kaira District most of these points were settled by the Collector in consultation with the Executive Engineer, and the occasions on which distinct orders were called for were very few. No orders were issued by the Civil authorities direct to the Public Works subordinates.

26. A Civil officer was appointed to each work. These officers were at first taken from the Head Kárkun class and were given salaries of Rs. 75 per mensem. When the works increased in size European officers were appointed to nearly all of them. These officers varied in rank and pay from a Forest Officer on Rs. 600 a month to Customs Inspectors on Rs. 125 and included one or two Staff Corps subalterns. As regards the relative positions of the Public Works Officer on the work and the Civil Officer, the principle followed was that whichever was the superior in rank became the officer in charge of the work. Owing to the high class of Civil officers employed, there was very little friction between the Departments.

ments. When the Civil Officer was also the officer in charge of the work, he had full authority to assure himself that measurements were correctly and punctually made, but when he was Civil Officer only it was not considered his duty to interfere as regards measurements, though he was ordered to bring to the notice of the Collector any defects which he might observe. When the Civil Officer was not in charge of the work, he was regarded as independent of the local Public Works Officer but subordinate to the Executive Engineer.

27. When local conditions affecting the application of the prescribed tasks were met with, the Public Works Officers and not the Civil Officer decided which of the tasks was applicable. This was regarded as a professional detail. I may note that more than one instance of hardship to the workers was observed by me as a consequence of inattention to this matter on the part of the local Public Works Officers.

28. The gangs of labourers were constituted of certain proportions of men, women, and children. The number in each gang was about 60 or 70. To a certain extent the people of the same village were kept together, but this arrangement was by no means universal. Family gangs were the most popular, but were found to be unmanageable when the numbers became large. The formation of gangs was carried out by the Public Works Officers.

29. Labourers were divided into four classes—

Special.		
Men	...	... Class I.
Women	...	... Class II.
and Working children		... Class III.

The wage scale adopted was that laid down in Appendix V to the Bombay Famine Code.

30. I am not sure that any sex distinction is necessary in the matter of classification and wages. As regards classification, a better ground of distinction is, I think, capability in the performance of the task, and in fairness the wage should follow the classification. In practice weak men were very often classed in Class II with the women. I do not know if exceptional women were ever put in Class I and paid accordingly, but I think not, though it was not uncommon to see women take their turn at the hardest work.

31. The Code system was not introduced from the first. From November till the end of January the system adopted was one of piece-work. In the beginning the payments were altogether by results, but towards the end of the period considerable numbers of people who were unable to earn a living wage were given nominal work and paid the minimum wage. To this extent the two systems were carried on simultaneously on the same work. They were also carried on simultaneously in the same district for a short time as the Code system was adopted on the Páli metal-breaking work somewhat earlier than on the other works the labour on which was less strange to the people.

32. My experience has led me to agree with the Commission of 1898, that a system of payment by results is unsuited to conditions of acute distress or actual famine. I think the Code system is an evil, but I fear that after a certain stage it is a necessary one. There will always be people who will not come to the works if they know they are to be paid only what they earn. Indefensible as such conduct may be, the declared policy of Government to save life renders it necessary that relief should be afforded even to those who decline to help themselves, and for such people the Code system is a necessity. At the same time I think the early introduction of the system is to be deprecated. The system of piece-work for the able-bodied with nominal work at a minimum wage for those who are unfit to earn a living wage by their own exertions seems to me to be open to but few objections in theory, but I am not satisfied from my experience that after a certain stage of distress has been reached it can be worked in practice without hardship. Its weak point is that it leaves too much to the discrimination of the subordinates to whom is entrusted the classification of the labourers. With a larger staff and officers of qualifications superior to those possessed by the ordinary Public Works Overseer the system might work well, but under the conditions which existed during the last famine and which, I presume, will generally exist, the system of payment by results is not in my opinion suitable to times of acute distress. That the introduction of the Code system causes demoralization is undoubted, but until arrangements can be made for the scientific discrimination of capabilities this evil is unavoidable if all possible lives are to be saved. I do not think that the timeliness of the beginning of relief measures is of much importance in this consideration. I am inclined to believe that at whatever stage the works were opened there would always be a large proportion of the distressed population who would hold back from them until the conditions became easy, preferring, as was the case in hundreds of instances in the Kaira District, to stay on and starve in their villages rather than to work hard for a wage which sufficed merely to keep them alive. To what extent this state of affairs would be altered by familiarity with famine and with relief measures I am of course unable to say.

I should like to add that the practical difficulties of discrimination to which I have alluded above have reference not only to the original classification which takes place when the labourers first arrive on the work. What is required is constant inspection of each individual to see whether he is still fit for the class in which he has been put or whether he should be removed from the piece-work gangs and given a nominal task. This work is obviously beyond the powers of a sole Civil Officer and one overworked Medical Officer, and on large works is more than can be expected from the Public Works subordinates; yet unless it is done effectively by some one, the errors of the original classification will remain un-

discovered and the death-rate will rise. From my experience I must note that as a rule the Public Works subordinates do not make much effort to differentiate the weak labourers from the others after the classing has once taken place.

33. I am not able now to state the task exacted at the outset. It was graduated to the class of workers. No allowance was made for the distance the workers had come. Subsequent changes of the task were on the whole, I think, in the direction of greater leniency.

34. The scale of wages adopted was, I think, adequate. There can be no question that the workers who earned the maximum wage obtained ample means of livelihood, and where there were several members of a family they were perhaps in receipt of higher wages than they would usually earn. The minimum wage was not unnaturally the subject of considerable grumbling, especially among the idle, but I am of opinion that it was sufficient for the support of life. On the whole, the condition of workers who had been for any length of time in receipt of the Code wages was distinctly good. Undoubtedly many of the workers, and especially those of the Dedh class, who are mostly labourers by profession, saved considerably upon their earnings. Several instances were brought to my notice. I may mention, as one of them, the case of some 50 or 60 workers who had fled from a cholera-stricken work to their own villages, remained there a full week living on their savings and returned to the work in the most excellent condition. There can be no doubt whatever that a family of honest workers can make enough out of the Code wages to leave them a balance in hand after feeding and clothing themselves. Copper coin did not return very freely to the Banias on the work. I think it was estimated that not more than 50 per cent. of the sum paid out weekly in wages was returned to the local Banias. This was, I think, due largely to the fact that the majority of the workers continued to reside in their own villages and purchased their supplies of food near their own homes or in the táluka market town. The price of grain was in almost all cases about one lb. in the rupee higher on the works than at táluka head-quarters, and this difference was an inducement to the workers to buy their food away from the works. Under the system of weekly payments there was naturally a more extended use of silver than would have been possible had the payments been made more frequently.

35. As regards rest-day wages the system at first adopted was that the wage rate for working days was so calculated as to include an allowance for the rest-day. Subsequently the rest-day wage was calculated separately at the rate of $\frac{1}{6}$th of the minimum wage for each day on which the worker was present and was paid in addition to the ordinary wages earned. My opinion is that the latter system is the better, first, because it makes clear to the workers that they are being paid for the rest-day and

secondly, because the worker who is most regular in his attendance benefits by his steadiness.

36. My experience has not led me to consider that the minimum wage is too high, except in the sense that it is sufficient for subsistence and that the idle worker can live on it without effort. For those who work honestly but are unable to earn above the minimum and for those who are doing nominal work, I am of opinion that the minimum wage is not more than sufficient. I think, however, it should be allowable to punish the really contumacious worker by resorting to a penal wage. This should be done only under safeguards as the practice readily lends itself to abuse. I am afraid there was a tendency, which required to be carefully checked, to consider that the wage should fall below the minimum whenever the work completed was less than what it should have been in proportion to the maximum task, and that not sufficient attention was paid to the existence or non-existence of contumacy. Thus persons who were working fairly but were physically unable to do more than they did were sometimes penalised for their weakness. Obviously this is a very serious evil and one which cannot fail to result in discouragement and demoralization. The resort to penal wages should, I think, be authorised only by an officer not lower in rank than a Public Works Department Sub-divisional officer and only when the necessity is concurred in by both the local Public Works Department Officer and the Civil Officer. Experience has shown that the effect of the penal wage may be most wholesome, but the system requires to be worked with very considerable discrimination if serious evils are not to result.

37. The minimum wage was allowed from the time when the Code system came into force. The penal wage did not anywhere become the wage generally earned, and in fact it was but little resorted to in the Kaira District.

38. Payment was, as a rule, made weekly. All new-comers, when the rush was not too great, were paid daily for the first week. On some of the works they were then paid bi-weekly for the next week and for the third week and after that received payment weekly. I am very strongly of opinion that the daily payment of new-comers is of the utmost importance if relief is to be really effectual, and I think that, when it can be managed, daily payment to all would be advisable. This view is not concurred in by some, at least of the Executive Engineers, and some of them hold that daily payments are impracticable on a large work without an enormous increase in the establishment. I am myself of opinion that the workers would fare better if paid oftener, and I feel sure that payments on most works could be made more frequently than once a week without any very serious increase in the establishment.

39. When people first came on a relief work they were paid daily, unless the numbers arriving were so large as to render this impracticable. No cases of

workers getting seriously into the Banias' debt came to my notice, but the practice of hypothecating clothes or cooking vessels was largely resorted to.

40. Payment was made to the individual as a rule, and I am of opinion that this method is the best.

41 and 42. I am not in a position to answer these.

43. Children were relieved in kitchens on the works, if too young to work themselves or too feeble. Weekly persons capable of some work were given light work, generally almost nominal, in gangs by themselves. They received the minimum wage and were not paid in proportion to results. I think it would be most difficult in practice to adopt a system of piece-work with favourable rates for the class of workers under consideration.

44. No contractors were employed at any stage of the famine.

45. Under the piece-work system, detailed muster-rolls were not, so far as I remember, kept up. There was no arrangement for the prompt introduction of the Code task system.

46. The prices scale for the calculation of the wages was practically fixed by the Mámlatdár, who communicated weekly with the officers in charge of the works in his táluka. It was based on cheapest grain, which for the greater part of the time was rice. Variations of less than 1 lb. in the rupee were, I think, neglected.

47. This appears to be a question which can be most suitably replied to by the Executive Engineer.

48. Tasks were varied under the orders of Government in the Public Works Department or by the Superintending Engineer. Alterations in wage were made under general orders of Government, certain discretion being allowed to the Commissioner. Orders in anticipation of sanction were very seldom overruled.

51. No organised endeavour was made to transfer people from large works to village works. At the time when the rains were expected small village works were opened, and those who preferred them were allowed to go to them, but owing to the enormous numbers then on relief it would have been impossible to provide for all on village works. Hence no special inducements were offered to people to go to the village works. Those who found them convenient went to them, and no formal drafting was necessary.

52. The small village works were opened in June with the idea of helping cultivators to find employment in the neighbourhood of their lands when the cultivating season began. As a matter of fact they did not draw many people from the large works, and they were never crowded. I do not think that more than 15,000 persons were on village works at any one time. They were, however, very

useful after the rains fell, until the condition of the soil made them, in some places, impossible.

53. The small village works included—

(*a*) Tank excavation.

(*b*) Drain construction.

(*c*) Village roads to wells and tanks.

54. They were conducted entirely under supervision of the Civil agency, and by direct management.

55. For laying down the work and for measuring it up a small staff of Overseers, including the Local Fund Overseers, was entertained. Each had two or three works in his charge. Payments were made generally in the presence of the Mámlatdár or the Head Kárkun in charge of the section, or, if the presence of one of these could not be arranged, a member of the Local Board was usually available. The village officers had strict orders to supervise the work as much as possible, and the Circle Inspectors also visited them.

56. No attempt was made on village works to work the Code task system. The scale of wages was laid down by Government and was intentionally fixed lower than that obtaining on the large works. The original rates had to be reduced subsequently as the works were found to be competing with the demand for agricultural labour. Employment was given to everyone who wanted it, but practically only the lower classes availed themselves of it.

57. No system of selection of applicants for relief was tried. The need for such selection was not apparent, for, as stated above, there was very great disinclination on the part of the distressed people to come to the works.

58. I do not remember any instances of people in any numbers passing from a large to a small work or *vice versa*. The large works were, I think, the more popular because of the Code system and because the wages were higher, but if people started on a village work they generally remained there.

59. I think small village works should be used as a supplement to the large works, but I would not open them until the large works had been well started. The village works could never in themselves give sufficient employment for large numbers, but they could be used—

(*a*) for special villages when there was found to be an invincible dislike to the large works owing to considerations of caste or family; for example, Rajput villages;

(*b*) for the employment of persons who have fled from cholera or other epidemic on a large work.

I am not altogether convinced of the expediency of this, because the village works would spread infection much faster and more seriously than if the runaways separated and kept to their own houses for a short period, but the existence of employment might, perhaps, be a good thing.

(*c*) to bring cultivators back to their villages for the cultivating season, and to employ people near their homes when the rainy season begins. Village works are useful for the class of people who decline to leave their villages, but will work near their homes.

Special Relief.

60. There are practically no aboriginal tribes in the Kaira District.

61. No forest or fodder works were opened as there are no forests.

62. No able-bodied persons were engaged on works of private utility at public expense. An experiment was tried, but people did not appear to appreciate relief in this form.

63. No special relief was given to weavers or other artisans The weavers of the district are also labourers (Dedhs).

64. The weavers showed no reluctance to go to relief works : quite the contrary: and they were the best workers.

65. Requires no reply.

66. The measures taken to prevent mortality of cattle were—

(1) Cattle camps.

(2) Transportation of cattle to forest lands in other Districts.

(3) Importation of grass by Government and sale at low price.

(1) Was successful, but was practicable on a small scale only.

(2) Was unsuccessful.

(3) Was successful and was much appreciated. Over 50 lákhs of pounds of grass were disposed of.

67. There was no grass in the district which could be exported to other districts.

Gratuitous Relief.

68. Dependants were relieved—

(*a*) In large public works in kitchens by cooked food.

(*b*) They were not relieved on small village works.

69. The form of gratuitous relief most employed was the village dole. Towards the end of the famine large numbers were relieved in village kitchens. The kitchens are not provided for in the Bombay Famine Code, but they seem to me a most excellent form of relief and better than the village dole when the numbers are large. Food I consider better than cash and cooked food better than uncooked food. With kitchens one can be sure that the person for whom it is intended gets the food. The dry dole is however necessary for those unable physically or for good reason unwilling to come to the kitchen.

70. Recipients of gratuitous relief were selected by persons with local knowledge. There was no test. There was practically no objection to eating cooked food except amongst a few Musalmans and the higher classes such as Patidars and Rajputs, of whom only a few received gratuitous relief for the greater part of the time.

71. In all I think 9 poor-houses were opened. I cannot now give dates. The people who frequented them were almost all Dharalas (Kolis), who were found wandering about the country or begging in the towns. The numbers were never very large.

72. Poor-houses were used as depôts for vagrants and immigrants. Persons who refused to work on relief works were not sent to poor-houses as a punishment. Very few would have regarded the transfer in that light.

73. The poor-houses were weeded out every few days.

74. I cannot say now how many village kitchens were opened. Practically none were opened till the rains. Most of them served one village and its hamlets only, but a certain number served as central kitchens for three or four villages.

75. The ration was the same as the village dole. Meals were distributed twice a day at fixed times. People were obliged to feed on the premises.

76. No limit of distance from relief works was fixed. Village kitchens were not opened in the villages where large relief works were open.

77. Admission to kitchens was regulated according to same rules as admission to village dole, except that all children were admitted.

74 (2). The poor-house ration was fixed according to scale in Code. It consisted generally of rice and *dal* once a day and *jowári* bread once a day, generally with *dal* soup. Such vegetables as were obtainable were also given, and salt always. Oil was sometimes given, but not always, as the people of the district are not habituated to it. In case of sickness or weakness the ration was varied at the discretion of the Medical officer.

75 (2). The village gratuitous relief lists were drawn up by the Circle Inspectors and checked by the Head Kárkuns. Names were added also by the village committee. The recipients were inspected weekly by the Circle Inspectors and as often as practicable by the other Inspecting officers such as Head Kárkúns, Mámlatdárs, and Sub-divisional officers.

76 (2). Payment was made in grain daily. A small experiment was tried in weekly payments, but it was not successful. Payment was made at the grain-shop or the village *chora*.

77. Gratuitous village relief was given to cultivators while their crops were coming up and also to people who fled home from cholera on the relief works. To the former class the relief was given from end of July to September. The latter only received it for a week or two.

78. Cooks were generally Brahmins. The majority of the distressed people were Dharalas (Kolis) and Dedhs. They showed no reluctance to cooked food at any stage. The Rajputs, Patidars, and Musalmans (except the very poorest) objected throughout.

79. Kitchens were in charge of specially appointed clerks, some taken from the Mámlatdárs' offices, or from the ranks of Talátis. They were supervised by the Circle Inspectors and Head Kárkuns and the superior officers as far as practicable.

80. Cheap grain shops were not opened by Government.

81. Such private ones as were opened were not on a scale sufficiently large to discourage importation or affect prices.

Suspensions and remissions of land revenue.

82. I am unable to give figures for suspensions or remissions.

83. They were to be based on the general capacity to pay of the individual, not on crop failure solely. The capacity of the individual was determined by the reports of the village officers checked as far as possible by the Mámlatdár and his superior staff and by the Sub-divisional officer.

84. They were determined after collection of revenue began.

85. There are no zamindári tracts in Kaira.

86. I am not in a position to answer this, as suspensions and remissions had not been finally sanctioned when I left the district.

General.

87. The numbers in receipt of relief at one time exceeded 25 per cent. of the population. The chief reasons were—

(1) Gratuitous relief was being given to a very large number of cultivators while their crops were coming up.

(2) Considerable numbers of Native State subjects were on the relief works.

88. I do not think relief was at any time excessive. Nor was it defective, except that it was not in the beginning availed of as it should have been. Large numbers of needy people declined to come to the works. To have relieved them gratuitously would have been to have caused widespread demoralization.

89. The classes in receipt of relief were, generally,—

(*a*) labourers;

(*b*) petty cultivators (State rayats);

(*c*) small landed proprietors.

The number of small occupancy tenants was fairly large.

There were very few proprietors (Grássias).

90. There had been no previous famine in Gujarát for over a century.

91. There was an undoubted contraction of private credit, but the majority of the distressed people exhausted their own resources before accepting State relief.

92. I am of opinion that during the famine under consideration and in the Kaira District few, if any, persons sought relief who were not in need of it. The tests of the Code were sufficient.

93. I am unable to propose any further tests, and I think it would be almost impossible to devise any method of selection for admission to relief.

94. Births and deaths are registered in each village by the Police Patel and in each municipal area by the Municipality.

95. I think the high mortality of the Kaira District is in a considerable measure due to the unsuitableness of the food. The almost universal food was Rangoon rice to which the people are not accustomed. They seldom cleaned it as it should have been cleaned, and many ate it uncooked. There can be no doubt that very large numbers died indirectly from insufficient food. They fell into a weak state and were unable to resist disease such as fever or diarrhœa.

96. I do not think the water-supply was a cause of increased mortality. Permanganate of potash was used very largely to disinfect wells when the cholera appeared, and I consider that this measure was most successful. The wells were disinfected every two or three days.

97. Every work had latrines, but they were very little used. There was a large staff of Bhangis always available and they kept the surroundings of the camps clean. The system was on the whole successful. The nightsoil was buried in deep pits. Poor-houses had their latrines which were also kept clean by Bhangis. At the works' kitchens latrines were provided for the children. On the works the sanitary arrangements were supervised by both the Engineer Officer and the Civil Officer. In the poor-houses they were in charge of the Superintendent.

98. Grain shops on works were regularly inspected by the Civil and Medical Officers. A few cases of sale of unwholesome grain were discovered.

99. Up to the rains no wild food products were obtainable. From August or September onward, large numbers of people practically lived on the grain of the "Samo" grass, which grew most abundantly all over the district.

100. I did not observe much immigration from Native States, but large numbers of Baroda subjects came to our works. Baroda villages are intermingled with those of the Kaira District. I am unable to state the proportion as there was great

difficulty in ascertaining which persons came from Baroda villages.

101. I do not think the mortality among immigrants appreciably affected the mortality of the district. I went into this question carefully, and my examination of a large number of the village death registers went to show that all but a very small proportion of the deaths recorded were of our own people.

102. The orphans were, as a rule, handed over to Missionaries. A certain number were sent to a Hindu Orphanage in Ahmedabad, but this soon became full. A few were made over to caste people. Orphans were disposed of during, as well as at the end of, the famine.

103. I have no suggestions to make as to the charitable relief fund.

104. There were loud complaints as to the inability of the Railways to keep pace with the fodder traffic. Grass, which was urgently needed, was in many cases kept waiting for weeks at the station of supply. This is true as regards both Government and private consignments. There were no complaints as to grain and no rise in local price of grain due to defective carriage.

104 (*a*). I am unable to answer this now.

105. At the beginning of the rains there were complaints in certain localities that the relief works were interfering with the supply of agricultural labourers.

106. I do not know the district sufficiently well to say anything as to the character of crops.

107. Wages are paid partly in bread, but I think the tendency is to substitute cash. I cannot say now whether cash wages have risen in sympathy with prices.

108. I regret that I have no copy of the Famine Code with me. The most important departure from its provisions was the establishment of village kitchens, and this was most successful. The other departures were not numerous and I think all were justified.

109. Staff Corps Officers were employed in supervision. I had no officers of the Native Army and no Non-commissioned Officers of the British Army. I think some more men might be obtained from the Forest Department for the work of supervision.

110. Non-official agency was made use of chiefly for inspection of small works, visiting of poor-houses and kitchens, and distribution of charity. To a small extent it was successful and chiefly as regards the charity, but I am afraid the number of non-official Natives in the district who are prepared to work hard in connection with famine relief is not large. Much assistance was received from the Missions, the members of which spared no pains. I am not sure that the use of non-official agency in a district such as Kaira can be very much extended.

111. (*a*) A change in the system of work has a very great effect on the numbers seeking relief. The numbers increased being much when the Codo system was introduced. The death-rate was not, I think, affected.

(*b*) The task affects numbers temporarily only, unless it is unreasonably stiffened, in which case it might also raise the death-rate.

(*c*) Altering the scale of wages has the same effects very much as altering the task.

(*d*) The mode of calculating fines is of importance, as if the labourers are discouraged by wages being cut they will leave the work in numbers. When they did so, however, they generally returned before long and I doubt if the death-rate was affected.

(*e*) The insistance on a distance test would keep away very many needy people and would tend to raise the death-rate. Compulsory residence has the same effect.

Drafting to distant works is not, I am of opinion, so objectionable if the drafts are carefully selected, and people sent who are already far from their homes. I do not think there were any cases of such changes leading to disorganisation or wandering.

112. My experience has not shown that the massing of people on large works tends to disorganise family life or to weaken social restraints or to relax moral ties. In the majority of cases family life was continued on the works. There was very little crime and no immorality came to my notice.

H. O. QUIN.

31st January 1901.

B 1669—5

Mr. M. C. GIBB, I. C. S.

Answers by Mr. M. C. Gibb, I.C.S., to the questions of the Famine Commission.

Introductory Note.

I went as Acting Collector to the Ahmedabad District in May 1894 for 6 months. Returned to the district again as Acting Collector in June 1895, and with the exception of several short periods of leave &c., did duty as Collector in the district till May 1899, when I went on furlough. I was recalled in the autumn of 1899 and took charge of the district at the end of September 1899, remaining in charge till the end of September 1900, when I went on furlough.

Introductory.

1. Speaking generally, the character of the harvest in the two years preceding 1899-1900 was :

1897-98 ... Rice poor; Dry-crops good.
1898-99 ... Good.

Of former years, 1896-97 was a very poor harvest ; 1895-96 poor for rice but fair for dry crops; 1894-95 very good for rice, very poor for kharif dry-crops.

Thus at the commencement of the rains of 1899 the outlook was normal.

2. The kharif sowings were much below normal. I cannot give exact figures.

By normal cultivated area I should mean the average of a certain number of (say 5) years. The area under each crop is entered every year in the village forms by the Village Accountant. This official is supposed to visit each survey number (the whole area of the village is divided into arbitrary divisions so called, of from about 1 acre to generally 8 or 10 acres, but sometimes much more), see on the spot what each survey number is cultivated with, making a rough measurement in case of more than one crop on a number, and write up his book accordingly. It follows that—did the Accountant write up the book from what he saw only—he would not enter at all a crop sown which did not come up at all. As a matter of fact, the Accountant gets the information required a good deal by questioning cultivators, without going to the field at all.

Orders were, I think, given in 1899-1900 to enjoin especial accuracy, but I should not think the returns of crop sown were at all trustworthy. This is not very material, as practically none of the crop sown matured.

3. (*a*) The average rainfall during the rainy season is 35 inches.

(*b*) The actual rainfall in 1899 was in the rest of the district 5 inches; in Dhandhuka and Gogo (that part of the district which geographically belongs to Káthiáwár) 7 inches. The percentage to normal was thus in Dhandhuka and Gogho $\frac{7}{35} = 20$ per cent; in the rest of the district $\frac{5}{35} = 14$ per cent.

(*c*) In the rest of the district the rains were entirely in the early part of the monsoon, in Dhandhuka and Gogho there was a fall in September, which (in Dhandhuka at least) was not sufficient to do any good.

(*d*) The normal distribution of rainfall is supposed to be:

June	...	...	...	5 inches.
July	...	...	...	10 „
August	...	...	...	10 „
September		...	...	5 „

for a 30-inch fall—add proportionately for a higher fall. As a matter of fact, however, there is often, I think, a much more uneven distribution and sometimes a much heavier fall in September. Sometimes there is considerable rain in October.

4. In Gogho only was there any kharif crop at all. In a few other places the crop on a few acres may have been saved by irrigation, but the amount was too small to be worth taking account of. Speaking generally the kharif harvest of 1899 was non-existent. Except a comparatively small acreage of well irrigated land there was no rabi crop sown.

5. I cannot give accurate figures.

There are some 16,000 mill-hands in Ahmedabad and say 3,000 in Viramgám. A good many of these are villagers, and would depend on the land, were it not for the mill industry. This, however, is practically the only industry which can serve as an alternative to field labour to the villager. The village artisan does of course depend on the land, for his payment is either in kind from the cultivator, or consists in the holding of land himself, or both.

Excluding towns therefore, practically the whole population depends on the land. Roughly I could divide them into

(1) Cultivators with fairly large holdings.
(2) Petty cultivators.
(3) Regular farm hands.
(4) Casual labourers.
(5) Graziers.

In the richer parts of the district there are a fair number of (1), consequently a considerable number of (3) and (4). In the poorer parts (North-East Prántij and Modasa notably) the land is mainly worked by (2) and there are comparatively few landless labourers.

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Preliminary Action.

[*Note.*—I was not in India when relief was first started.]

6. Total crop failure made it certain that relief would be necessary, but the test of willingness to work for living wage was applied.

7. I was not in India when the first relief works commenced.

8. Small works on a piece-work system were started first, but big works were opened in September. The test applied was willingness to go to work.

9. (*a*) Lists of relief works were ready, surveys and estimates had been made of some of them only.

The lists proved defective in 1899-1900 in two ways:—In the first place they included works where, owing to failure of rains, the failure of the water supply made it impossible for a large number of labourers to be maintained. In the second place they were calculated to employ an average of 60,000 people for 6 months. As it turned out, the numbers who had to be employed were much larger.

(*b*) I do not remember that the regular relief programme sent in every year contains any special mention of establishment. No lists of candidates qualified for famine service is kept up in ordinary years. The establishment in famine time is recruited:

Public Works Department—

(*a*) from the ordinary establishment;

(*b*) by temporary appointments.

Civil—

(*a*) from the ordinary revenue establishment;

(*b*) by employment of candidates for employment in the Revenue Department, of which there are always lists kept up—and by utilizing the services of officials from other departments who can be spared, *e.g.* schoolmasters.

10. No programme of village works was ready in reserve. But the principal village works consist in the removal of silt from tanks—estimates of them can be prepared very quickly—and in the programme the repair of a certain number of village tanks in each táluka (it not being specified which tanks) was included.

There are always some small irrigation tank repair estimates and generally some water-supply tank repair estimates in readiness, because these are carried out year by year, as funds are provided by Government and the local funds respectively, and estimates are prepared beforehand.

11. (*a*) A few test works were opened at the very beginning of the famine. These consisted entirely in excavation of tanks (already in existence). They were started on the piece-work system, and, either because of the small size of the works, or

because the payments were somewhat low, they did not attract large numbers. Large public works were started in September.

(*b*) The first poor-house opened was that at Dhuliakot (close to Ahmedabad City), which was opened in November. This was followed in quiet succession by poor-houses at or near all táluka headquarter towns and at some other places.

The number of wanderers from Native States round who came into the district, and the tendency to wander among the population of the district, rendered the poor-house method of relief specially important, a result which was also contributed to by the fact that many people flock to a large place like Ahmedabad either in search of alms or work.

(*c*) (i) Kitchens on works were started originally to feed the children of new-comers only or of weakly gangs who were considered unable to do the piecework which was at first the system followed. Piecework soon had to give place to the Code system of task work, and then kitchens for dependants and for the relief of new-comers was started on all works.

[*Exception.*—On works only calculated to last a very short time or to employ less than 2,000, there were no kitchens as no Civil establishment was appointed. Dependants were relieved by cash doles. Also on some works the system of relief by distribution of dry grain was followed.]

(ii) Kitchens other than on works, *e.g.* village kitchens, were started at a late period of the famine.

(*d*) The relief of the poor in their own villages by large landlords is a subject I shall come to later on.

At Ahmedabad itself a cheap grain shop was started early in the season of distress and managed by a committee, the principal of whom was the late Mr. Manibhai Premabhai, President of the Municipality.

At some places (*e.g.* Bádla) the local Mahajan undertook to feed the poor of the village in the early period of the famine. When this was done, the local official encouraged the work done, but did not directly interfere with it. It gave place ultimately to the Government dole system.

On the whole private charity, as is natural when the richest part of the population are the Jains, expended itself largely on relief measures for cattle.

Collection of wanderers, relief at dharmsháls &c. of wanderers out of private subscription, did not come completely into the regular organized system till a later stage. Relief of respectable persons, purdah women &c., from the charitable relief fund was started at a fairly early period.

(*e*) The only Government forest consists in some 12,000 acres, chiefly brushwood, in Modása. It is never closed to grazing. People on the relief works were allowed to gather fuel free from these forests.

12. *Preliminary.*—The Revenue system in ordinary times comprises under the chief táluka authority (the Mámlatdár) the Circle Inspector, who is supposed to note all facts concerning quality of harvest, prices, &c. (the number of Circle Inspectors for táluka varying from one to four) and the village accountant (taláti) who, besides the duty of collecting the revenue, is the village statistician. In tálukdári villages (the tálukdári estates comprise about one-third of the district) there is no Circle Inspector, but there are bán kárkuns whose duty it is to see to the up-keep of the boundary marks. Talátis, or village accountants, exist in some estates only, and the village statistical papers (which are less dependable than in Government villages) are kept up in estates where there is no taláti by the mukhi or village headman. The inámi villages are not many in number. The system is similar to that in tálukdári villages, there being no accountants appointed by Government. There are no hereditary village accountants in Gujarát as there are in the Deccan. The machinery for ascertaining the condition of the people in ordinary times is fairly good, though less complete in tálukdári and inámi tracts than in Government villages. It cannot, however, be too strongly insisted on that the chief district and táluka officers' knowledge of their charges is a factor of much more importance than the reports of subordinate statisticians. An Assistant Collector well acquainted with his charge (about three tálukas) knows pretty well which parts and which villages will feel the pinch first. The Collector can himself in a few weeks of continual riding get a very good idea of the condition of his district.

(*a*) and (*d*) In August a circular was issued to all village officers to let no one die, carefully inspecting their villages, and being on the look-out for wanderers. Soon after a large addition was made to the Circle Inspector staff and Circle Inspectors and village officers were relieved of such of their ordinary routine duties as could be omitted, and told to devote all their attention to famine work.

In November orders were issued for the forming of committees in all villages for the putting on dole of all entitled to it under the Famine Code rules.

The famine Circle Inspectors, alluded to above, were the immediate supervisors of this work. In the beginning of the famine they were supposed to visit each village twice or three times a month. Later on the staff was increased so as to admit of nearly all villages being visited once a week, or every ten days at the most.

Early in the famine the táluka staff was strengthened by the appointment of additional Aval Kárkuns to do the Múmlatdár's routine work, leaving the Mámlatdár free to give more time to inspection.

Assistant and Deputy Collectors were relieved of magisterial work, as far as possible, by the investment of Subordinate Judges with magisterial powers. They all visited energetically in their charges, and were thoroughly cognizant of all that was going on.

In the largest charge an Assistant, who came out in 1898, was employed to assist the Assistant in supervision, besides journeys to special places. I, as Collector, travelled in detail twice over the whole district, halting two or three days only as a rule at each camp, and then visited the principal places in the district again a third time.

At a late stage in the famine when cholera had led to desertion of the works, and the advisability of keeping the people in or near their villages was a prior consideration, with a view to the coming seed-time, village relief by doles or in kitchens assumed a preponderating importance, and two officers of the Postal Department (sent to the district in May, and first employed mainly in supervision of work and poor-houses) were employed partly in supervision of village relief. Two Staff Corps officers were employed on the same duty as were also two supernumerary Assistant Collectors, who had arrived in India the previous cold weather (1899). Some half dozen Inspectors of the Salt Department were similarly employed in villages near their beats and did excellent work. Officers lent by the Commissioner N. D., and employed in giving out takavi, were also employed in about July and August in the supervision of village relief.

(*b*) The local employment of labour by private persons was no doubt largely stimulated by loans to agriculturists.

(*c*) Organization of local charity—

(i) *Village relief and poor-houses.*

When I issued a circular for the forming of committees in every village for the inception of relief by dole, I also asked Native Chiefs, who were land owners in the district, to undertake the relief of the poor of their villages, and I asked my assistants and deputies to try to induce other wealthy landlords to do the same, and also to try to persuade the well-to-do of villages (where such existed) to relieve their own poor. The system of inspection was to be—and was—the same as that where relief was given by Government.

The result of these measures may be summarised as follows.

(*a*) Two of the principal Chiefs, Patri and Limbdi, replied that they would rather get all the poor of their villages into head-quarters and treat them in a poor-house. This measure was carried out in a very half-hearted way by Patri. Limbdi, on the other hand, who I believe treated all his people with care and consideration, in more ways than one, did his best to carry out the measure properly, but not with great success. But, ultimately, we had to start, and Government had to pay, for dole in the villages owned by Patri and Limbdi. The other Chiefs, Wala and Wankaner, consented to relieve, and did relieve their poor by dole. Of landlords not Native Chiefs, all the tálukdárs were themselves much hit

by the famine, and they took no share in organized village relief. Of Inámdárs but few undertook the relief by dole.

Mr. Madhavlal Ranchodlal and the Mahánt of Bhimnáth may be mentioned among those who did. Of villages where there were well-to-do Banias some had, at the beginning of the famine, undertaken the relief of their own poor, but none continued to do so throughout.

(ii) *Private Poor-houses.*

That at Patri has been referred to.

At Ahmedabad there were several relief institutions. Two of them were regular poor-houses and one was a place where wanderers were fed previous to dispatch to works. From this institution and from one of the poor-houses, stretcher parties were sent out to pick up distressed wanderers. At the beginning of the famine the police were the chief Government helpers in the work of collecting vagrants. In the hot weather the collection of distressed wanderers assumed considerable importance. A committee was held, and certain areas apportioned to different institutions (the Municipality taking one quarter, parties from the Government poor-house another, and above referred to institutions (paid for chiefly by private subscription) another). And eventually sepoys (men and non-commissioned officers lent from the Bombay Army) were employed in supervising collection of wanderers at Ahmedabad, Viramgám, and Dholka, the greater number (nine, I think) at Ahmedabad, while an officer of the Northern India Salt Revenue Department, who was put under my orders, was given the control of the operations in Ahmedabad.

(iii) *Cattle.*—This will be dealt with elsewhere.

13. About 4 lákhs of rupees were given out in takavi, either under the Land Improvement Loans Act or the Agricultural Loans Act, in the early part of the cold weather. These loans were given almost entirely :

(i) for the excavation of new or repair of old wells;

(ii) for the purchase of seed and instruments of husbandry (chiefly the kos and other instruments for well irrigation).

The conditions were the usual ones on which takavi loans are made, except that the periods of re-payment were made somewhat longer than they usually are.

Loans issued in other than Government villages were usually issued to the tenants, the superior holders going security. In tálukdári estates, the Tálukdár generally put his estate under the attachment of the Tálukdári Settlement Officer as a security—the attachment being a nominal one only. Besides the regular takavi loans some considerable loans were especially granted by Government to some of the larger tálukdári estates for purposes

similar to those for which takavi loans are employed, the details being managed by the Tálukdári Settlement Officer, who consulted the Collector.

14. In, I should say, about one-third of the district the subsoil water is too brackish for well-irrigation—and in some places where the wells are usually sweet, they turned brackish in the season of 1899-1900. In the north-east corner of the district there is a rocky subsoil, and water is not everywhere obtainable. In the rest of the district the subsoil water is sweet and available at moderate depth, varying from about 30 or 40 feet* in Dáskroi to some 10 feet in the parts where there is much natural moisture, such as that watered by the Hathmathi (dry in 1899-1900). Some of the black soil tracts contain water at about 15 feet.

* Depths given by guess only.

In the light soil (goraru) packa wells cannot be made as the soil falls in—but in much of the black soil country packa wells are possible, and I have frequently seen irrigation from such a well, which takes four or 5 men a few days only to make. To water a large area even here, however, the packa well is required.

I may mention here that the number of wells in ordinary times must necessarily, I believe, be limited by the amount of manure available—manure being necessary for the continued success of irrigation.

I cannot give figures as to depths of water, but though there is no doubt that the water was much lower than usual in 1899-1900, the astonishing thing is how well it held out. The supply, however, was not so full as usual, and I have seen many wells which could be worked only for a portion of each day. The principal matter of complaint, however, was not the insufficient quantity, but the deteriorated quality of the water.

A large number of wells, both kacha and packa, were dug or repaired by loans, but a very much larger number were dug or repaired without loans.

Three irrigated crops were grown in the year—

Firstly, autumn fodder crops were grown over certain lands, not however by loan. These crops were successful, but the area was small. [All the fodder crops need absolutely sweet water. Both wheat and barley will thrive (especially barley) with water slightly brackish. The area on which fodder can be grown by irrigation is therefore necessarily limited.]

Secondly, winter crops (barley and wheat were the chief) were grown—some of them only of course from wells made or repaired by loan. For some reason, however, which has never been discovered, these winter crops were, speaking generally, a complete failure. In some parts brackishness of the subsoil water accounts for this, but the crop failed even where water was sweet. The ryots said that the land had suffered from not being washed by the monsoon rains as usual.

I may note here that the estimates of anna valuation made by the Circle Inspector were frequently too optimistic. The statistics were compiled from these estimates, and it is quite possible that owing to press of other duties, and to statistics being asked for without delay, the Circle Inspectors' estimates, when compiled, were insufficiently checked. I mention this, because it is possible that the recorded statistics may not bear out the fact, which every District officer knows, that the winter irrigated crop failed.

Thirdly, over small areas a fodder crop was raised by well irrigation in the hot weather. This crop, contrary to expectation, throve well.

(*a*) Has been answered above.

(*b*) The packa wells made or repaired from loans will of course be of the greatest use hereafter.

(*c*) There is no doubt that the loans gave employment to numbers who would have come on relief.

15. The test works have been alluded to. [When I arrived in the end of September 1899, the big works had already commenced.] The test works consisted entirely in the excavation of tanks, and they were so few and so soon replaced by the large Public Works Department works, that the subject is not of much importance.

16. The test works were run on the piece-work system with no maximum or minimum.

17. *Vide* above.

18. The numbers in need of work round Ahmedabad Town made it evident that large public works only would meet the case.

Large Public Works.

[Most of these questions could be better answered by the Executive Engineer.]

19. Large public works were opened in September.

20. These works were under the control of the Executive Engineer (I omit second part of this question). I was not in India when the first works were opened. I believe there was not much delay, but the rush of 10,000 people seeking admission in two days caused some confusion at first, which was soon righted by the exertions of Revenue and Engineering officers, notably Mr. Mead, First Assistant Collector. Subsequently we were more prepared for possible rushes. I have known cases* where people were not admitted at once, because the numbers had exceeded our expectations, but in such cases additional works were always opened in the neighbourhood without much delay.

* One case I personally found.

21. A supervisor was generally in charge of several works, an overseer or sub-overseer of one work or part of one work.

22. Hutting was not provided on all works for the whole number of workers. At extended works,

say 3 or 4 miles, it was found that the people preferred sleeping where they worked rather than going to a camp some distance off. At others, hutting was provided as far as possible. In the rains hutting was provided for workers who could not go to their villages.

The Public Works Department made excellent arrangements for water supply.

Food supply.—Before a work opened the Mámlatdárs arranged for Banias to set up shops. Speaking generally, there was no difficulty about this.

It was the business of the Public Works Department to erect a hospital before a work opened. It was my business to let the Sanitary Commissioner know in time what works would be opened, and when. It was his business to provide hospital arrangements in time. When there were two or three works of moderate size close together, one hospital served all.

23. Admission to works was for all persons willing to submit to the labour test.

No formal order for a distance test was made, but in practice there was to a certain extent such a test, because new-comers were (until the cholera scare made it desirable to try and attract workers, who had left, back again) only received at certain works, generally one in each táluka. There were in the district, for most of the famine, some 25 to 30 works going on at once. Some of them were necessarily quite near together. New-comers were relieved on arrival by receipt of food at the kitchens. Had they therefore been received at all works, persons in some parts of the district might have almost gone a walking tour from one work to another, and never done any work at all.

Secondly, in compliance with directions from Government, persons on works living in the vicinity were drafted off to more distant works. Compulsory residence could not be absolutely enforced, but by the above arrangements most of the people did live on the works.

[This does not refer to works opened after the rainy season of 1900 was due to begin.]

24. I think 10 to 15 miles (a day's journey) is all that the Gujaráti should be compelled to travel to a work. It is, however, not possible always at every stage to attain the ideal. The Ahmedabad District contains (excluding Ahmedabad City) a population of a little over 800,000. For a long period there were 100,000, or over, on relief. The density of population is about 250 to 300—say 250—to the square mile. Thus, on an average, a work with 10,000 workers would serve a population of about 80,000—spread over an area of between 250 and 400 square miles.

[The district is very scattered—to the north, Prántij and Modása separated from the rest of the district and Modása itself mixed up with Native States. In the centre, Dáskroi, Dholka, Sánand and Viramgám, the latter projects into Gáikwári's territority on the north and is some 60 miles long north to south. The

Dhandhuka táluka itself contains some 1,500 or 1,600 square miles, and is long and irregular in shape.]

Distance from their homes travelled by applicants for relief.

The first works opened were two, near Ahmedabad itself. These were followed by large works (drainage channel excavations) in the Viramgám táluka and in the northern part of the district —metal breaking—and shortly afterwards by tank digging in Dhandhuka and Gogho. Up till nearly Christmas the tálukas of Sánand and Dholka remained without any large works. At the very beginning of the distress numbers of persons had come from all parts in search of work at large centres of population. Therefore throughout the famine persons from as far south as Dhandhuka were to be found on works in the centre of the district.

It was at first intended—in view of the fact that several large useful works were possible in Viramgám and only one such possible in Sánand and Dholka—to draft Sánand and Dholka people to the Viramgám works, and open large works in these two places only when the Viramgám works were full. To prevent however hardships being caused by distance, feeding stations were established on the main routes from Sánand and Dholka to the Viramgám works. Similarly, want of water making aggregation of large numbers impossible in West Dhandhuka and the nature of the country making tank-digging impossible in East Dhandhuka, the Dhandhuka works were of necessity confined to the centre of the táluka—and therefore relieving stations were established *en route*.

It was found that the brackishness of the water in Viramgám, where the works were, set up intestinal complaints among the people of the sweet water tracts of Sánand and Dholka—and additions were made to the Sánand and Dholka works, while those to be carried out at Viramgám were somewhat reduced in magnitude.

Eventually there were large works within easy reach of every village except in Dhandhuka (for reasons above stated).

25. The Collector was ultimately responsible for all famine matters. Otherwise Public Works Department officers were not subordinate to Revenue officers.

26. With a few insignificant exceptions (*e.g.* a work with 2,000 or less workers—or one destined to last only a few weeks, and undertaken in conjunction with other works in the neighbourhood) there was a Civil officer on each work. The Civil officers were generally selected from the subordinates of the Revenue Department. At first some officers of the Aval-kárkun standing were selected—but officers of this class were too few and too urgently required for it to be possible to spare their services

and, as a rule, the Civil officers were taken from among the village accountants or lower grade kárkuns—generally the former. The salaries of Civil officers were generally fixed at the ordinary pay of the office, plus ten rupees per mensem,—but was, in some instances, more. Thus salaries varied between Rs. 25 and Rs. 50. At the beginning of the famine the Civil officer was independent of the Public Works Department subordinate in charge of the work—but, at a fairly early stage, Government ordered that the Civil officers should be subordinate to the Public Works Department officer in charge of the work.

Owing to—

(1) his position as subordinate to the Public Works Department officer in charge;

(2) to the fact that only men of the village accountant class could be spared as Civil officers;

(3) to the fact that the Civil officer's staff was (besides kitchen kárkuns) limited by Government orders to one kárkun,—

the Civil officer's time was largely taken up

(1) in receiving new cases at works where newcomers were admitted;

(2) in the management of the relief of dependants.

27. All such questions were decided by the Public Works Department officer.

28. As a rule families and people from the same village arrived together—and were ganged together.

29. Labourers were classified as: diggers, carriers (adult), and children.

30. Without any exception the women were carriers, and adult males, capable of hard work, were diggers. I do not think that, in these circumstances, the absence of any distinction between men and women led to any hardship or difficulty.

31. The first large works started were the Chandola tank excavation and the Malekshaban tank excavation. [Both started before I came out.]

Chandola was begun entirely on the piece-work system. At the Malekshaban I think the task work system was first tried—and then changed—some gangs being still kept on the task work system, but most put on piece-work. The other works, which followed in November, were also started on the piece-work system.

Various orders were found necessary to prevent—

(1) earning of too large wages on this system by professional labourers;

(2) hardship to people in bad condition.

And at an early period—I think in early December* — the Code task work system was everywhere introduced.

* It may have been earlier.

32. My experience led me to conclude that the Famine Commission of 1898 were perfectly right in holding that a system of payment by results is unsuited to conditions of acute distress.

33. Fining was not enforced at the outset. The same task was demanded from all, but those considered unfit for hard work were either given nominal work or put on separate gangs.

[It is possible it may have been too liberal in the case of whole families, but it is difficult to see how this could be avoided.]

34. I am sure that the scale of wages adopted was adequate, and inclined to think it was not unduly liberal.

Workers who stayed long on works were generally in good condition.

I was told that some workers who remained a long time on work saved on their earnings. This might argue that the scale of wages was unduly liberal, but I am inclined to think that it would be impossible to hit upon a scale which would be sufficient for all to keep in good condition without enabling some to save. The individual wage was certainly, in purchasing power, much below that earned by agricultural labourers in ordinary times.

35 A rest-day wage (the minimum wage) was given, the amount being added to the wage given for the week or a proportionate amount for part of a week. I have no fault to find with this system.

36. I am not inclined to think that the minimum wage is too high.

37. "Was the minimum wage allowed at the outset?" I do not know if the latter words refer to the beginning of the famine or have reference to new arrivals on a work.

At the beginning of the famine no orders for a ~~final~~ wage had been given.

As to new-comers the orders in my district were that they should not be fined in the first week. Fining was very rarely carried below the minimum wage. The orders were that fining down to the penal wage should be for continued contumacy only. On the whole, wages approximated more nearly to the maximum than the minimum. On many works there was hardly any fining at all. I would take this opportunity of stating my belief that the exaction of proper work depends more on proper management than on fining. The only work where I personally found fining more or less universal was one where proper supervision had not been exercised. On some works which were not popular fining was unknown, the officer in charge and his subordinates insisting on performance of full tasks. One reason why fining was rare in my district, compared with others, was that (except in Modása) the works were entirely earth-works, a class of work better suited to unskilled labour than metal-breaking.

The difficulty in Northern Gujarát is not to keep those not needing relief from going to works, but to induce those needing relief to go to them. The general tone therefore adopted by the principal (and

consequently by the subordinate) officials was one of leniency.

38 and 39. Payments were made weekly, but newcomers were given an advance of one anna a day for the first week and a lump payment of 4 annas in the middle of the second week.

I do not think daily payments would be possible without a much larger staff than the Public Works Department possessed.

An objection to daily payment would be that it would take up every day some portion of the worker's time and therefore (unless tasks were reduced) make him more liable to fine.

I think there was a consensus of opinion among officials in Ahmedabad that the system obtaining worked well.

40 and 41. These questions would be better answered by the Executive Engineer. I have stated that fining was rarely carried down to the penal wage, and on the whole was the exception not the rule.

I must state, however, that about August we stiffened the management and fining became more common. Every inducement had been held out to induce people to return to their homes and I think some rigor was then desirable.

43. For maximum wage *vide* Code. Children were relieved in kitchens. Persons quite unable to work were given purely nominal work (earning the minimum wage), also (and this system assumed more importance towards the end of the hot weather, the date of its inception I forget) weakly gangs were constituted doing similar work to other gangs, but specially tasked. Both systems are desirable, the former for the quite incapable, the latter for the weakly.

44. Contractors were not employed at any stage.

45. Question would be better answered by Executive Engineer.

46. At every Mámlatdár's head-quarters there is a regular price list kept up.

A small fraction was added to cover the expenses of carriage of grain to the work and wages were paid on the basis of prices so derived. The prices were, if I remember right, fixed separately for each work by the Mámlatdár. The wages were generally fixed on the basis of the lowest priced staple (generally jowári).

46. The decision for the opening of a new work was arrived at by the Executive Engineer and myself in consultation after obtaining the sanction of the Commissioner N. D. (his sanction being anticipated in cases of necessity). I then informed the following officers that a new work would be opened on or about a particular date :—

The Sanitary Commissioner. The Deputy ditto ditto. The District Medical Officer.	With a view to provision of hospital requirements, appointment of Hospital Assistant &c.
District Superintendent of Police.	For appointment of police and watchmen.
My own Revenue subordinates.	For arranging for grain-dealers &c.

I also arranged for the appointment of a Civil officer and staff.

It was the duty of the Executive Engineer to see to the erection of all necessary sheds, including the hospital sheds and kitchen sheds, and to provide tools and plant.

The conservancy and water-supply was also in the hands of the Public Works Department.

The Civil officer's tent had a flag-staff and labourers in need of relief repaired there. It was part of the Civil officer's duties to gang the labourers, but as a matter of fact I think the Public Works Department officers often assisted in this.

48. I cannot answer this question adequately from memory.

51. No.

Small Village Works.

52. Small village works were introduced towards the end of the hot season of 1900 to supplement the large works—

(1) for the employment of poor tálukdárs who had managed to exist on their own resources in the commencement, but were beginning to be in distress;

(2) for the employment of cultivators and others near their homes.

53. Small village works consisted entirely of tank digging.

54. They were conducted under the supervision of Civil agency, but non-official committees, where possible, were appointed to assist. They consisted in the principal tálukdárs of a village or in the principal villagers (traders and superior cultivators).

55. The work was usually laid down by the táluka local board overseer. It was measured once a week by him or some such official and local Banias were induced to advance grain daily to the people.

56. In the works started for tálukdárs the Code task work sytem (with a wage I think 25 per cent less than the Code wage and a reduced task) was tried, but if I remember right owing to the difficulty of working this system with a limited establishment it was abandoned in favour of piece work.

In the other small works piece work was adopted from the first.

The works started for tálukdárs were at first ordered to be confined to members of that class, but as we found that there were other applicants really needing relief, we soon threw the works open to all classes. The other small works were from the first open to all.

57. *Vide* answer to preceding question.

58. The orders given by the Bombay Government were that no small work should be started within five (5) miles of a large work. These orders were kept to as a rule, but I think there were some exceptions.

I do not think the small works attracted labourers from the large or vice versa. I think that small works if widely opened at an earlier stage might have done so.

59. This question is an exceedingly difficult one. The number of labourers on all the large works before the cholera scare was about 120,000.

Whether cholera would have a similar effect in dispersing people from small as it did from large works is doubtful. If it would, there would be so much the less reason for the substitution of small for large works. If it would not, and supposing that we had replaced large by small works everywhere, the numbers on works would have greatly exceeded 120,000 and might have been expected to reach 200,000.

The Public Works Department could certainly not arrange to supervise a larger number than 100,000 on small works, supposing there were no big works, and I doubt their capacity to manage transfer of this number from say 30 large to 100 or 200 small works and to start the latter without difficulties, which might cause hardship to the workers. The civil department would be quite unequal to the task of efficiently organizing and supervising say 100 small works with 1,000 labourers on each. It follows that if, in order to meet a probable cholera scare in the hot weather, the policy of substituting small for large works universally were determined upon, all idea of efficient supervision would have to be abandoned and the works would partake largely of the character of gratuitous relief.

Moreover, it is doubtful if to attain the desired objects it would not be desirable to arrange as far as possible that the average number on each work should approximate more nearly to 500 than to 1,000. This would give 400 works for the district, 400 works for 800 odd villages. A further objection to the substitution of small for large works is that at the former there can be no hospital arrangements. There can also at the works be no relief of dependants. That would have to be done in the villages. With the dole system existing in every village the relief of all dependants of labourers on works might not add so materially to the work of village officers as to leave them much less time than under the present system for other matters, but it would make some difference.

I have noticed what seem to me the chief objections and difficulties in the way of a universal substitution of small for big works at the period when a cholera scare is likely to occur.

But I cannot help observing that to depend almost entirely, as we do now, on large works is a system which cannot be considered satisfactory at that period of the year when a cholera scare is probable.

The principal way in which we tried in Ahmedabad to prevent the exodus from the works brought about by the cholera scare causing hardship was a large expansion of gratuitous relief in villages.

It was ordered that all who fled the works on account of the cholera scare should be relieved gratuitously in the villages (if in danger of starvation).* I endeavoured to prevent this necessary measure resulting in more demoralization than could be helped by ordering in some parts that the able-bodied among relief recipients in the villages should be employed on small local improvements such as removing silt from the village tanks, and I believe some useful work was done in this way. No measuring up of the work or exacting of special tasks was attempted.

* These words were liberally interpreted.

I must take leave here to state in detail the system on which some of our piece-work† small works were managed.

† So called.

The work having been lined out and gangs formed, the village Bania agreed to advance rations daily to the labourers. The rations were the equivalent of the wage earnable for the work to be done. A committee with the help of a local man of sufficient education to be able roughly to estimate the amount of work done supervised the work, and on their assurance that amounts were due, the Bania paid the rations to the labourers in their presence. Once a week an official came and measured the work and the Bania was recouped by submitting his bill to the táluka treasury just as in the case of village gratuitous relief. This system depended on ~~their~~ being a fairly *th.* trustworthy committee and a local man able to gauge roughly the work. It was not really of course a piece-work system at all, it has some obvious weak points, but in practice it worked well.

I think some such plan might be somewhat widely adopted towards the end of a famine, and thus a goodish number of small works introduced to supplement but not to replace large works.

At the beginning of a famine it would not admit of sufficiently strict tests.

Special Relief.

60. The Kolis of Modása are I believe of Bhil descent. They are not hill tribes, but approximate more nearly to such than do any other classes in the district. I was at first afraid they would be slow to come on regular large works and had in contemplation to propose the opening of a number of small works. I was however assured by Public Works Depart-

ment officers who had served long in that part that the Kolis would manifest no reluctance to come on the large works, and as a matter of fact as soon as works were opened in their neighbourhood (I think early in November) they crowded on to them. They however manifested greater disinclination to continuous monotonous labour than did the inhabitants of the more civilized part of the district. It was common for them to leave works for a time and then return to them. On the whole, however, the numbers on works in this part of the district were very large throughout the famine in proportion to population, and though this was partly due to considerable numbers from the neighbouring Native States being on our works, the greater number of the people on the works belonged to the district.

61. The extent of forest has been mentioned (11 (*e*)).

62. No.

63, 64, and 65. The weavers of coarse cloth (Dheds) are as capable of work as any other class and came on works. I had conferences during the famine with native gentlemen on the question of the necessity of special relief for other artizans, notably the weavers of silk in Ahmedabad City (Kanbis chiefly). We came to the conclusion that though pinched they were not absolutely famine-stricken. Of other artizans I may mention that dyers were to be found on works near Ahmedabad.

66. The measures taken to prevent mortality among cattle were—

(1) deportation of cattle by rail to grazing grounds in Thána district and Dharampur State;

(2) maintenance of cattle in cattle camps;

(3) supply of fodder brought by rail (*vide* question 67).

(1) Besides the agricultural cattle there are (or used to be before the famine) large numbers of cattle the property of graziers (Rahabaris). These men as a rule do not own land, but purchase of Government every year the right to graze on waste lands (for practically nominal sums).

Ahmedabad, and especially the south-west, is one of the great centres for the breeding of cattle, the young of which are bought up by the agriculturists of this and other Gujarát districts. The brood cattle owned by the graziers are not like cattle of agriculturists stall-fed—every year they become very lean by the end of the hot weather. As the graziers as a rule own no land, it was impossible to make takavi advances to them. It was therefore necessary to devise some other means to pay expenses of deportation to grazing grounds. A public meeting was held in Ahmedabad and subscriptions raised for this purpose. In order to prevent the scheme being a mere charity one and thus tending to the demoralization of those to be benefited, it was resolved that on the return of the cattle either for every head returned a sum (calculated to cover expenses) should be paid by the owner or one-half of

the cattle of the owner should be forfeited, the proceeds of sums thus paid and sale of cattle forfeited being divided *pro rata* among the subscribers.

It was not generally believed by the Ahmedabad public that Gujarát cattle would thrive in the Konkan and the subscriptions were not as large or numerous as might have been expected. A large sum was however contributed out of the Ahmedabad city permanent relief fund.

Some 2,500 cattle were sent to the Thána grazing grounds by the above means. Some were working cattle belonging to cultivators, but most were brood cattle and young stock the property of graziers. In view of the number of cattle going from other districts, the amount of grazing land available, the possibility of supervision and return of the cattle ultimately, it was held that no more than 2,500 could have been sent, however large the subscriptions.

There were about 1,000 head of cattle sent to the Dharampur State, expenses being paid for chiefly, if not entirely, by takavi advances. About 500 cattle returned out of the 2,500 sent sent to Thána. I witnessed the disembarkation of most of them from the train. Those I saw returned were entirely cows and young stock. I believe few, if any, of the working bullocks sent to Thána survived. The brood cattle not being stall-fed are hardier than the working bullocks. The cattle which did return were in such bad condition that it would not have been worth the trouble and expense of retaining half belonging to each owner with a view to sale for the benefit of subscribers, and the committee therefore resolved after giving due notice to the subscribers to let the owners take away the cattle unconditionally.

Figures may lead us to conclude that the experiment of sending Gujarát cattle to Thána was a complete failure, but (1) I am not certain that some were not sold in Thána by the herdsmen: we could not take any stringent measure to prevent this; (2) the percentage mortality of brood cattle and young stock in Gujarát was much larger.

The experiment of sending cattle to Dharampur was much more successful.

(2) Cattle camps—

Four cattle camps were maintained in Ahmedabad either directly under Government or with Government supervision.

Cattle were received either—

(1) by gift conditionally;

(2) by sale, the price being very low;

(3) conditionally, payments according to class of animal being due from owner on return of the cattle.

Fodder was got in by rail.

The total number of cattle in these camps was, if I remember right, about 3,000 at a time.

The establishment was paid for by Government: the grass was paid for by Government and charged to cattle camps. The expenses for fencing &c. were defrayed by subscription.

I cannot give figures of mortality, but there can be no question but that the cattle camp method of saving bovine life is efficacious, and I do not think it unduly expensive.

But there must be (as there was in Ahmedabad) efficient supervision, and I doubt whether this could be arranged for for a larger number than 3,000 or elsewhere than at the head-quarters of a district.

I may mention here that there were a considerable number of cattle camps kept by the Mahajan at various places. The Mahajan at Ahmedabad had at one time, I believe, some 8,000 cattle. Some of the Mahajan camps in the district were mere shambles, but on the whole, notably at Ahmedabad, much good was done.

The Mahajans also exported cattle to grazing grounds.

Success of methods for saving cattle.

No method could have affected a large percentage. A census of working bullocks taken in June showed that about 50 per cent had died.

There were no figures for other classes of cattle when I left, but I expected that 80 to 90 per cent must have died.

67. There was no fodder in the district except that grown by well irrigation, which was mostly grown by cultivators for their own cattle, but some of which was sold at high prices, the total amount being insignificant compared with requirements.

Fodder was cut in the Central Provinces, Thána, and the Tapti Valley for transmission by rail to the Ahmedabad district and other affected tracts for supply (1) of cattle camps, (2) to cultivators and others, mainly to cultivators. There were six sale depôts (including two at head-quarters) established in the district. The sale price was at the beginning put at Rs. 10 per 1,000 lbs., Government paying the difference between that and cost price (which I believe was about Rs. 13). About April it was resolved to lower the price for poor cultivators to Rs. 2 per thousand pounds, the difference between that and Rs. 10 being ~~sent~~ not from the charitable relief fund.

At first there was great difficulty in getting trucks, but ultimately fodder being required at a later period than was anticipated (owing to the holding off of the rains) and the arrangements made by the Railway Companies being more complete, the whole amount cut was sent. The business done was considerable when the price was at Rs. 10 and very large after the price had been reduced to Rs. 2. Besides grass a certain amount of kadbi was sent

by Mr. Abbott of the Bundlekund grass and cattle farm. Much of it was very inferior.

The best grass came from the Central Provinces. The arrangement made was that the Mámlatdárs on payment of cash or issue of takavi advances (advances being book advances only) issued tickets and the ticket-holder was given grass by the depôt keepers on production of the ticket.

The amount supplied at one time to one man was limited to 1,000 lbs.

While the 10 rupees price was in vogue transactions were sometimes by takavi, sometimes cash, generally I think by takavi. After reduction of price to Rs. 2, transactions were generally cash.

When Mr. Abbott sent down 900 odd bullocks for loan, gift, or sale at low price to cultivators who had lost their bullocks in the famine (expenses being met from the charitable relief fund) he also sent grass for maintenance of these bullocks for some weeks.

Gratuitous Relief.

68. (*a*) Large public works. Dependants on these were relieved in kitchens, except in a few instances where owing to the smallness or short duration of the work it was not worth while to appoint a civil staff &c. In these dependants were relieved in cash, also on a few extended works dependants were relieved by dole of raw grain, but on most of these the kitchen system was ultimately introduced.

When arrangements were made for maintenance of works during the rains, the difficulty of providing rain-proof accommodation led to our obtaining the sanction of Government to relieve dependants by grain dole, but on several works we found the parents were not feeding their children properly under this system and had to provide kitchens.

On the piece-works first started, the labourers were expected to feed their own dependants, the payment being calculated accordingly, but we soon found it necessary to make arrangements for relieving the children.

(*b*) On small village works there was no necessity for relieving dependants. These could be put on dole in the villages.

69. The numbers in receipt of village dole always I think exceeded the numbers in poor-houses. At the same time the fact that the district is surrounded by Native States and that wandering even among people of the district began at an early period and tended to continue, gave to relief in poor-houses a special importance. The number of dependants in receipt of relief on works depended largely of course on the number of workers, but destitute persons not dependants of workers were also relieved at the works kitchens.

The difficulty of arranging for gratuitous relief in scattered villages with no grain-dealer led to the

measure adopted in some villages of Modása of trying to induce people entitled to dole to go to a poor-house instead, and elsewhere the same measure was adopted for similar reason to some extent at the commencement (and also because of the greater difficulty of supervision of village gratuitous relief). Towards the close of the hot season gratuitous relief in villages was very largely expanded—

(1) to make sure of relieving those who fled the works owing to cholera;

(2) as an inducement to the people to remain in their villages and to begin agricultural operations on the opening of the rains.

At one time the numbers in receipt of gratuitous relief in villages exceeded (if I remember right) 12 per cent of the rural population.

70. When the cholera scare led to desertion of works it was not possible to confine village gratuitous relief strictly to the classes mentioned in the Famine Code (paragraph 56 or thereabout), and when cholera had abated, leniency was desirable in order to induce people to return to or remain in the villages with a view to the coming sowing time. Orders were given that besides the classes enumerated in the Famine Code gratuitous relief should be given to all persons who had a legitimate reason (*e. g.* tending cattle) for remaining in the village and no means to support themselves. Takavi advances being given to cultivators (with some security) for purchase of seed and cattle the charitable relief fund was used for grant of seed and subsistence money to petty cultivators, who undertook to cultivate with pick or hand plough and pending grant of subsistence money from the fund, or in cases where all available fund was spent on seed, as it was in some tálukas, the cultivators who so undertook to cultivate were put on dole. The families of such petty cultivators were also put on dole.

Ordinarily the entry on dole was carried out by village committees and supervised by circle inspectors and the táluka and district staff.

Special officers were appointed for the giving out of charitable funds for seed and subsistence, and the fact of a grant from such funds for seed was held to entitle the recipient and his family to dole supposing that subsistence money as well as seed money was not given.

71. The first poor-house opened was that near Ahmedabad at Dhuliakot, and after that poor-houses were opened in rapid succession at all táluka headquarters and some other places, there being in all 13 poor-houses (including 2 at Modása).

The numbers in Dhuliakot ran up to about 2,000 at the close of the hot season, and then when continued holding off of the monsoon made another famine seem imminent, ran up to 4,000.

The next biggest poor-houses were the two at Modása (taken together) and that at Dholka.

Most of the inmates of the poor-houses everywhere were Kolis by caste, agricultural labourers in ordinary times.

The reason of specially large numbers in Dhuliakot was that a large town attracts people in search of (private) work and charity from all parts and when these fail they resort to the poor-house. The numbers in Modása were large, partly because we to some extent relieved people in the poor-house there who would have been relieved by dole elsewhere, partly because the population is poor and idle, partly and largely because Modása is surrounded by and interlaced with Native States of the Mahi Kántha, where famine relief organization was of the meagrest and most inefficient description.

Besides agricultural labourers there were a considerable number of professional beggars in the poor-houses. There was, I think, not very many cultivators.

72. Persons on the way to works could be and were relieved by being fed in poor-houses.

No. To send a man to a poor-house from a work would have been no punishment.

73. Yes. All inmates of the poor-houses were systematically inspected periodically and those able to work drafted off to works. The difficulty was that had these people not been lazy originally they would probably have gone to works in the first instance and never needed poor-house relief. When the poor-house feeding had given them back their strength, their laziness remained and when drafted off to works they frequently ran away on the way or soon deserted the work. People used to be sent off from the Dhuliakot poor-house roped together in charge of a police guard and frequently half or less arrived at the work.

74. I take this question to refer to kitchens other than on works.

I cannot give the number of kitchens which were opened in villages. They were opened about the beginning of the rains and were expected to serve the villages where they were and other villages or hamlets within 3 miles.

75. The rations were those of the Code (minimum). Meals were given twice, about 10 A.M. and 6 P.M. People ate the food on the premises. I do not remember issuing or being given any particular order on the subject, but I should have prevented or tried to prevent food being taken away had I come to hear of it.

76. I do not remember. As a matter of fact no village kitchens were I think started near works where there were kitchens.

77. Those admitted to kitchens were those put on the dole lists. The test was the same. But persons of the higher castes or cultivators put on dole (to support them when beginning field work) were allowed to receive a grain dole, other persons entered

on dolé lists being compelled to go to kitchens. On this subject I may observe that kitchens were of the greatest use in checking the abuse of the dole system. Persons entered on the dole list unnecessarily would abstain from going to kitchens.

74. Rations as per Code. The sick were treated in hospital.

75. Village gratuitous relief lists were drawn up by village officers or committees and inspected by—

(1) Circle Inspectors,
(2) Mámlatdárs,
(3) District officers,
(4) Special inspecting officers.

At a later stage.

In the first stages of the famine Circle Inspectors were not sufficiently numerous for it to be possible generally for inspection of each village to take place more than once a fortnight. When the staff was increased inspection took place once a week or once in ten days.

76. Payment was made daily in grain at the chavra (village public hall). In some cases owing to there being no grain-dealers payment by cash dole was sanctioned. In some (for the same reason) the grain dole was weekly (rations being fetched from neighbouring villages). The relief of purdah women was made weekly by flour dole, but this being found not acceptable in all cases, cash payment was in some cases substituted.

77. *Vide* answer to questions 69 and 70.

78. The higher castes were not fed in village kitchens. I cannot give the castes of cooks in village kitchens (on works they were Bráhmans), but they were not of lower caste than the food recipients.

79. The Commissioner N. D., I think, ordered that village accountants should be in charge of the kitchens, but the work was too heavy for a man with other work to do properly, and we had generally to appoint special kitchen superintendents (generally men of the Kárkún class, *i. e.* Bráhmans, Baniás, or Kshatris). The supervision and check was similar to that exercised in the case of other village gratuitous relief.

80. At the very beginning of the famine a cheap grain shop was opened in Ahmedabad under the supervision of a committee, the actual management being exercised by the late Mr. Manibhai Premabhai, President of the Municipality. The only check to regulate admission to benefit was that only very small quantities were sold to each purchaser.

Cheap grain shops were opened by Missionaries and others at other places. I cannot give cost.

I do not think cheap grain shops a very suitable form of relief when a famine is well established. They may do good at first.

81. I do not think cheap grain shops were on a sufficient scale to discourage importation, nor do I think that they influenced the price of grain. If, however, business men in Ahmedabad think that the cheap grain shop there did anything to check rapidity of a rise in prices at first, I should not dispute their opinion.

Suspensions and Remissions of Land Revenue.

Before answering questions on this subject in detail, I crave leave to make a few preliminary remarks.

As is well known the assessments in Bombay are fixed for thirty years. They are supposed to be so calculated that good years ought to enable the ryot to pay in bad, and taking the Presidency generally, this is probably the case. The assessments are mostly low in proportion to produce; but the assumption that the ryot actually will save in good years to enable him to pay in bad is based on theory rather than fact.

Sir Theodore Hope, himself a Bombay Revenue officer, has stated that "to the rigidity of our land revenue system must in fairness be attributed some part of the indebtedness of the ryot." The last Commission on the application of the Deccan Ryots Relief Act made, I think, a somewhat similar pronouncement.

I have seen in favour of exacting all the revenue possible in famine years the following argument used :—

"The ryots are either well-to-do and can afford to pay or so indebted to the moneylender that it is really he and not they who pay, and to remit the assessment would benefit him not them."

This argument leaves out of account all shades between white and black. It is hardly to be supposed that in any district all the ryots can be either quite well-to-do or the tenants or serfs of the moneylender.

I cannot speak of the Deccan now, but when I was in Ahmednagar in 1892-94, this state of affairs did not, I think, obtain in that district.

In Ahmedabad many, probably the majority, of the ryots are not very well-to-do and yet are more or less dependent on the moneylender without being his tenants or being hopelessly involved in debt.

In all such cases if assessment is exacted in a famine year and the Bania pays it, the amount is debited to the ryot in the Bania's books. Thus the exaction of assessment must add to the ryot's indebtedness and may accelerate, if not cause, his ruin. I have I think heard it argued that the assessment is so small compared with cost of living through a famine year, that to exact it can make no practical difference in the year's expenditure. I think this argument is certainly not in accordance with fact. A ryot and his family will live on very little and the exaction in hard cash of even a small sum may make all the difference.

Moreover, the assessment payable by many not well-to-do ryots is over 30 Rs., and ryots may be more or less dependent on the moneylender and yet have a much larger assessment to pay. Gujarát has special claims to leniency. I put this argument before Government in a confidential letter at the beginning of the famine.

One of the most important points in fixing the assessment is the character of past seasons. In the 30 years which preceded the original and in the 30 years which preceded the Revision Survey, there had been no famine. Gujarát has been always considered extremely unlikely to suffer from famine (*vide* the Statistical Atlas).

One would expect to find the assessments fixed considerably higher than would have been the case had famine been considered likely. And as a matter of fact every officer acquainted with both provinces knows that not only actually, but in proportion to produce, assessments are much higher in Gujarát than in the Deccan.

But if the Government did not expect famine and fixed the assessments accordingly, the ryot can hardly be blamed for holding a like opinion. The scale of living is higher than it is in the Deccan. Savings are more frequently invested in the purchase of additional land or cattle, in building, and in money-lending to other cultivators. Land could be sold in the famine year only at a great loss, cattle were a source of loss not profit, and no interest could be recovered on loans to agriculturists.

Further, the larger number of cultivators (the Kolis, &c.) are probably little, if at all, better off than the ordinary cultivator of the Deccan without his thrift or industry.

That Government did not expect famine in Gujarát and fixed the assessment accordingly is an argument for the justice of remitting or at all events greatly reducing the assessment on all uncultivated land in a year in which there is no crop, irrespective of the ryot's ability to pay.

That the ryots had not expected a famine affects also their ability to pay.

At an early period of the famine Government sent for estimates of how much revenue could be recovered. The total fixed land revenue of the Ahmedabad district is (roughly) 15 lákhs. I sent in an estimate that a small portion (I think 5 lákhs) could be recovered. The Commissioner, N. D., agreed. Government gave it as their opinion that considerably more (I think they said 11 lákhs) could be recovered and called for fresh estimates. On a second trial we found ourselves unable to alter materially our first estimates. Government then passed a Resolution stating that time would show whether they or the local officers were right, that it was not worth while, in consequence of the opinion of the latter, to alter the estimates they had submitted to the Government of India, and the important thing was not to determine how much was recoverable, but to lay down principles of recovery.

Intrinsically of course the question of how much *could* be recovered was of importance only with reference to the budget, but I have referred to the controversy, because I think that the fact that Government maintained against the opinion of the local officers that a great deal of revenue could be recovered cannot have failed to exercise great influence on the minds of native subordinates.

I think there was a feeling that Government expected a great deal of revenue to be recovered and would be pleased by any efforts which would bring about this result. The orders given regarding suspensions were briefly that all should pay who could and enquiry should be made in each case.

The Resolution passed in the famine of 1896-97 had given specific orders on this point. The orders were (roughly) that the well-to-do should pay crop or no crop; the not well-to-do should pay if the crop exceeded 4 annas.

The same Resolution was made applicable in the last famine.

I had drawn up forms of statements designed to show individual capacity to pay, and these forms along with certain proposals I made regarding method of recovery of revenue were sanctioned by Government for (I understand) all districts.

The statements were two.

The first had reference to the state of things before the irrigated rabi crop * was reaped and was designed to show exactly who could pay on resources apart from crops. The second was designed to show who could pay from the proceeds of the rabi crop.

* Practically the only crop.

The statements were to be filled in in the first instance by the village officers and checked by circle inspectors and the superior revenue staff.

The orders of Government given in the 1896-97 famine were that no measures for distraint of property should be taken in any case without the order of the Assistant or Deputy Collector. In my report, with which I submitted forms of statements referred to above, I also proposed that ordinarily measures for attachment of moveable property should not be made, but that the only property which ordinarily should be proceeded against for non-payment of land revenue should be the survey number on which the revenue was due. The proposal met with approval and orders were issued by me accordingly, but owing to combinations among moneylenders and other well-to-do persons, it was found necessary occasionally to threaten attachment of and I believe in some cases to attach moveable property.

About the beginning of the rains figures compiled from the statements before referred to were ready, and I obtained the Commissioner N. D.'s sanction to the formal suspension of all land revenue which the persons responsible were entered in the statements as unable to pay and also ordered revi-

sion of the statements as far as they concerned those entered as able to pay in case of inclusion among those of persons unable.

About the same time Government passed detailed orders regarding recovery in the next year or years, enjoining enquiry in detail regarding each occupant, and directing that remissions might be given in case of those ryots who after the reaping of the 1900-1 crop and payment of that year's assessment were absolutely unable to pay the arrears without trenching on immediate means of subsistence.

The statements and detailed enquiries above referred to applied to ryotwári villages. As regards tálukdari estates (which occupy about one-third of the district) except a few estates owned by Native Chiefs of Káthiáwár, the tálukdárs (who are many of them involved) were obviously unable to pay and nearly all the revenue was suspended. As regards inámi villages the Inámdárs pay only a quit-rent, and this as a rule could be and was recovered.

82. I cannot give figures.

(*b*) Practically no land revenue had been formally remitted when I left India in the beginning of October 1900. Government had refused to consider the question of remission except as noticed above, viz., after enquiry as to crop of 1900-1 and ability to pay in that year.

(*a*) As stated above suspensions were sanctioned, but not till about the beginning of the rains of 1900.

83. This question has been answered. The principle was that all who could pay should pay. I would further state here that the recommendation of the Famine Commission of 1897-98 that no one should be forced to borrow in order to pay the assessment is held by the Bombay Government to mean that no one should be forced to borrow on the security of land which he needs to provide him with subsistence. Persons who borrow on security of ornaments or on the security of land which is over and above that which they need for their subsistence are not (as I understand the orders of the Bombay Government) considered to be forced to borrow.

The statements referred to above designed to show each individual holder's capacity to pay were compiled by village officers in the first instance and checked and if thought necessary altered by Circle Inspectors and the táluka and district staff.

84. No suspensions were formally sanctioned (except in case of the Mewasdars, a small class of tálukdars in the north of the district) till about the rains of 1900. But the land revenue was intended by me to be asked for from and I think was only asked for from those occupants entered in the statements as able to pay. I write from memory, but I am sure my orders on the subject were clear, and I think they were carried out. I respectfully call attention to the point, because if the evidence of the Commissioner N. D. (the report of which I

have seen, as also the reports of other witnesses in Gujarát before the Commission, since I wrote my replies) was correctly reported in the weekly edition of the *Times of India*, his evidence would bear the interpretation that demand preceded enquiry. This enquiry in each case preceded or should have preceded the demand for revenue.

As stated above no remissions or practically no remissions had been given when I left the district (end of September 1900).

85. I think that, speaking generally, none of the large landholders, whether tálukdars or inámdars, recovered any rent to speak of at all. Certainly they recovered none or next to none on uncropped land (and the area cropped was insignificant). Rent is very often and in smaller estates nearly always paid in kind, and there being no crop no rent was due in these cases.

The Thákor of Limbdi, who besides being a Chief in Káthiáwár is also a tálukdar in the Ahmedabad District, made no attempt to recover any rent even on land cultivated with well-irrigated crops (the only cultivation which existed).

86. It was a frequent remark that the moneylender would not lend because the assessment (for which all ryots would be responsible, if not this year, then next) would be a first charge on the land. I think that if Government had made it known that remissions would be widely given the destruction of credit would have been less than it was.

In default of remission a declared policy of spreading the revenue over a few years (say 4 or 5), instead of ordering that all should pay as soon as ever possible, would have done something to maintain credit.

There are 40,000 ryotwari occupancies in the district. It is impossible for superior officers to make the enquiries into the circumstances of each holder themselves. The duty is necessarily relegated to the village officer, an official who gets often not more than the pay of a syce and never more than the pay of a butler. Government intend to guard against oppression by ordering that distraint should only be made by order of the Assistant or Deputy Collector. As however the village officer must perforce make the enquiry, and not the Assistant Collector or even the Mámlatdár, the orders in question appears to me an insufficient safeguard.

I believe that in most cases the statements showing individual capacity to pay were fairly well prepared. Mistakes, if anything, were made in entering as able persons unable to pay.

I have been told, however, that in all cases where ryots were entered as unable to pay the talatis expected a small bribe.

It is almost inevitable this must have been so, except in the cases where the ryots' means were insufficient even to rake together a few annas.

I found some, but very few, cases where ryots' land had been attached or forfeited, when in my judgment it ought not to have been. On the whole there were very few cases of distraint of any sort.

I must crave leave to refer while on the subject of suspensions and remissions to one aspect of the question which I have not been asked to notice, I mean the political aspect.

There can be no question that the famine or rather the relief measures had the effect of drawing together the rulers and the ruled—the Englishman and the native. The political good of this was great, but I think that the better class ryots had a feeling that Government in pressing them for revenue in the time of their distress were neglecting them, while they spent millions of money and endless trouble in keeping alive the classes below them.

There are no more industrious, no more law-abiding and (~~have~~ occasional extravagances on ceremonies) no more frugal and thrifty persons than the substantial cultivators, and in not declaring and enforcing a generous policy in the matter of land revenue Government appear, to my humble judgment, to have lost an invaluable opportunity of earning the gratitude of one of the most deserving classes among the population.

Finally, I would observe that the actual recoveries were small and that a declared generous policy would not have led to so much financial loss as might be expected.

When I left the district in September, of a fixed land revenue of about 15 lákhs about 3 lákhs had been recovered, and I have no doubt that a very large portion of that not recovered will have to be written off.

It may be said that under the Bombay system enquiry into each case cannot be avoided, and before enquiry is complete nothing can be promised. I think however, even if individual enquiry cannot be omitted, a generous policy may at the outset be declared. Further, my personal opinion is that whatever the logical result of the Bombay system, individual enquiry in a year of absolute failure is a great mistake. If Government cannot (as I think the survey in Gujarát would justify their doing) remit at once all revenue on uncultivated land, they might at least suspend it and declare it payable in instalments which might be spread over 5 years, everywhere remitting in certain tracts, *e. g.* Modása, the poorer parts of Prántij, and the Nal country. Personally I think suspension and levy by instalments (supposing remission out of the question) might have been adopted in the case of land owned by moneylenders as well as other land. In fact I would distinguish by tract not by individual. In the poorer and more scattered parts the moneylender is seldom the owner. If however considered necessary, a rough enquiry could be made and land

shown to be owned by capitalists exempted from the concessions allowed.

Not all capitalists are bad landlords, and making a distinction in their disfavour has several disadvantages.

87. The number of persons in receipt of relief exceeded 15 per cent, reaching about 20 per cent at the end of the hot weather and beginning of the rains.

This was mainly due to the large numbers in receipt of gratuitous relief in their villages.

88. I am of opinion that at the period alluded to in reply to question 87, considerable numbers of people were in receipt of relief who did not really need it. I do not see how such relief can be granted on a very large scale without this being the case. The grounds for my opinion are that one found people in receipt of relief in quite good condition and recently admitted (so that their condition cannot have been due to receipt of relief), that when in any village relief by cooked food in a kitchen was substituted for grain dole numbers decreased, that numbers were largest (if I remember right, not only actually but in proportion to population,) in Daskroi, the richest táluka.

At the beginning of the famine gratuitous relief in the village was, if anything, rather defective. All entitled to it did not always get it. This was due to apathy and laziness sometimes displayed by village officers and committees. After the cholera scare the tendency was the other way. It was very difficult to get native subordinates to exercise common sense in selection of applicants. Circle Inspectors would, when it was known that a ~~limit~~ policy was desired, put numbers on for no sufficient reason, and when this was discovered and orders for reduction given, would strike off people who obviously could not do without relief.

The large numbers however who were in receipt of village gratuitous relief about June to August is mainly due to the inclusion of other class than those given in paragraph 56, Famine Code (*vide* answer to question 70).

89. The casual labourers were probably the first to come on work than the small cultivators and regular farm hands. Some few tálukdárs came on early in the famine, but the number of tálukdárs on large works was not great. In the north of the district the majority of the labourers on the work were cultivators throughout the famine, because in poor tracts there are few landless labourers. The outcastes (Dheds, Chamárs, and Bhangis) lived throughout the earlier months of the famine on the flesh of dead cattle and produce of skins of cattle which died (the skins of cultivators' cattle being the perquisite of the Chamár and Dhed). They therefore only came on works at a late stage.

90. There has been no previous famine in Gujarát within British rule. I have no previous experience

of famine. Speaking generally, few persons came on relief works who did not need relief. Many abstained from doing so till a late stage and some abstained altogether who did need relief (although works were within easy reach of all).

91. Credit was very greatly contracted throughout the famine. I don't believe funds for subsistence were lent by the moneylender to the ryot to any large extent. Good cultivators possessing wells could often borrow. The universal desire of cultivators of all classes to obtain takavi loans is itself a proof of the contraction of credit. In ordinary times the best cultivators think it beneath them to borrow of Government.* Moreover, the Banias are reluctant to let their clients borrow of the State

* A substantial pátidár can borrow (without giving security) at from 6 to 8 per cent in ordinary years.

I think as a rule persons did not seek State relief (on works) till they had exhausted their own resources. There are of course some exceptions. The Borah cultivators of Dhandhuka, for instance, came on works, I believe, when they had no need to.

92. I consider the tests of the Code were found sufficient.

94. In villages the headman is the registrar of births and deaths, the register where he cannot write being written up by the taláti. In towns the duty devolves on the Municipality. It is only in towns that there is any legal obligation on the public to report births and deaths.

95. I have no statistics to refer to. I think mortality may have been and probably was increased among even the comparatively well-to-do by less nutritious food than usual. The Gujarát cultivator is accustomed to drink milk or at all events buttermilk. The mortality among cattle must have deprived him of this. I saw people frequently lying ill on cots in the villages who belonged to the better classes and were obviously not famine-stricken. There were frequent complaints of fever at a time when fever is not usually prevalent. Among those who came on relief works and the poorer classes generally, monotony of diet probably had a bad effect. Dysentery and diarrhœa were very rife throughout the famine.

The thousands of people who earned a fair subsistence by collection and sale of fuel, leaves for fodder and the like, must have suffered both from insufficient quantity and deteriorated quality of food (*vide* also reply to question 99).

96. Water became more brackish than usual in many parts. The supply, however, did not fail. I have stated (answer to question 24) that brackish water caused sickness on some works.

A grant was made by Government for repair or construction of wells in urgent cases. There were only a few such. Permanganate of potash was used for disinsfection of wells during cholera time both on works and in villages.

97. (*a*) On works.

The sanitary arrangements were made by the Public Works Department in concert with the District Medical Officer and supervised by all inspecting officers, especially the District Medical Officer.

The non-pollution of wells was very carefully attended to, the arrangement for provision and protection of water-supply being excellent.

(*b*) Poor-houses.

Sanitary arrangements made by the Revenue authorities elsewhere and by the Civil Surgeon at headquarters, the District Medical Officer being consulted. Inspection carried out by all inspecting officers.

Arrangements sufficient.

(*c*) Kitchens. On works sanitary arrangement a part of those on works. In villages beyond cleaning the place afterwards no special sanitary arrangement needed.

98. Grain shops were inspected by inspecting officers. Unwholesome grain sometimes discovered and when so, orders given. Burma rice was found to give diarrhœa. It is mixed with lime for preservation. Orders given that it should be cleaned. I cannot say how far orders carried out.

99. The most important wild product used as food is "bid," the root of a reed which grows in and near the Nal and in some of the marshy land in the east of Dhandhuka.

The poorer classes near the Nal live on this largely in the hot weather every year. In the famine year the smaller cultivators and labourers in the greater part of the Sánand, Viramgám, Dholka, and Dhandhuka tálukas left their homes as soon as the failure of the kharif crop was certain and set to work to dig up the "bid."

To those used to eat it it did no harm, but was said to disagree with those not used to it, and especially in Dhandhuka much sickness was attributed to it.

In the beginning of the monsoon the seeds of grasses are always eaten to a certain extent. These grasses were in the early part of the 1900 rains more plentiful than usual and very large numbers lived on them wholly or partially. They are quite wholesome.

100. The inhabitants of Native States round poured into the district at the beginning of the famine and kept coming into it throughout, more or less. It is quite impossible to state what proportion such persons on relief bore to the whole number. With reference to Baroda our orders were only to relieve in cases of necessity, in other cases referring applicants to the Baroda works. In Gogho, which is interlaced with Káthiáwár States, our orders were not to admit Káthiáwár subjects, as it would have been impossible to have provided work had we done so.

In the north of the district Mahi Kántha subjects were admitted, but those belonging to Idar drafted off as far as possible as occasion offered.

Persons from Native States would give the names of British villages as their place of residence, a practice it was impossible to check.

There were considerable numbers of Native State subjects in our poor-houses, especially Modása, where they came from the Mahi Kántha, and Mandal, where they came from Káthiáwár and Pálanpur.

I think a considerable number of those persons who wandered about and died by the roadside came from Native States. Mr. J. Benjamin's poor-house in Ahmedabad had when I visited it a large proportion of Native State subjects.

101. I cannot give figures.

102. Throughout the famine applications came in from various institutions, chiefly missionary institutions, some in Gujárat, others elsewhere, for the taking of orphans, and representatives of these institutions were permitted to take orphans and deserted children from poor-houses &c. on their agreeing (1) to maintain the children till of age to support themselves; (2) start them in life as far as possible; (3) return them after the famine to parents or guardians on production of proper proof.

About July it was ordered that no deserted children or orphans shall be allowed to be removed from the district, and a special home for such children was started in Ahmedabad, to which they were sent from poor-houses in the district.

This home was still in existence when I left.

103. Large sums from the charitable fund were spent in provision of fodder. The severity of the famine was largely due to great cattle mortality and I think the object in question a legitimate and proper one.

104. I heard no complaints that the Railways could not keep pace with the grain traffic.

There were, especially at the commencement of the operations, many complaints that they could not keep pace with the fodder traffic, and although ultimately all the fodder cut for supply through Government officers was sent. No doubt had the Railways been able to send more earlier, more could have been cut. The private fodder trade would also have been capable of expansion.

104 (*a*). Weekly post cards showing the traffic in food grains were sent in by station-masters.

105. At the beginning of the rains of 1900 there were some complaints that owing to large numbers on the dole labour could not be obtained for rice and tobacco transplantation.* The reduction of doles was then commencing. I heard no such complaints in the fair season. There was very little private labour.

* Both forms of labour in which large numbers are wanted for short time.

106. I do not know of any marked change in recent years. I have not studied statistics of crops in pre-railway days. It is worth noting, however, that the food grains grown are hardly sufficient (according to statistics) for the population in normal years owing to the large areas occupied by fibres and oil-seeds.

107. If you ask either a farmer who employs labourers or a labourer what are the wages of the latter, the reply usually is, so many annas and rotla, rotla meaning the midday meal, a common form of payment for many kinds of agricultural labour (*e.g.* reaping, crop-watching,) is by a portion of the crop or otherwise in kind.

The wage of an agricultural labourer in ordinary times varies from $1\frac{1}{2}$ annas a day and rotla (per man) to about $3\frac{1}{2}$ or 4 annas a day according to locality and kind of labour. Labour is sometimes paid by the piece.

108. Some departures from the Famine Code have been referred to. The expansion of gratuitous relief is the most important. The ~~general~~ wage on works is another departure, but as it was hardly ever given in the Ahmedabad District, I need give no opinion on it.

As to expansion of gratuitous relief to include other than the incapable, it was no doubt justified at the time it was put in force. I have, I think, heard it argued or heard arguments which implied that gratuitous relief should have been expanded at the commencement of the famine to include classes not enumerated as entitled to relief in the Famine Code.

There is no doubt that many persons capable of work abstained from going to works though in need of relief, and consequently got into bad condition, and this increased the mortality.* But had those capable as well those as incapable of work been put on gratuitous relief before a late stage of the famine, there would have been widespread demoralization, a general disinclination to go on works, and possibly as much mortality as there was under the system followed.

* *Note.*—It has never, I think, been laid down whether it is the duty of Government to save life at any cost or whether it is their duty simply to give every man a chance of saving himself.

109. Two Staff Corps officers were at a late stage employed in supervision of works and poor-houses and village gratuitous relief. They did excellent work, but I would suggest, with respect, that as far as possible officers should be chosen for duty in the Presidency to which they belong.

Two European officers from the Postal Department did similar work: both did excellent work. European Salt Inspectors in the district did very good work in village supervision. Two native coast guard inspectors were at a late stage sent to me and were employed in superintending poor-houses An officer of the Northern India Salt Department was employed in supervision of the collection of wanderers.

110. Some missionaries helped and did excellent work in (1) supervision of poor-houses, (2) giving out of seed and subsistence money (not that given out of the central charitable relief fund). Native gentlemen managed cattle camps and the superintendents of poor-houses were generally non-officials of position in the place. Some did excellent work, some had to be replaced by paid agency.

Village committees were appointed to manage village gratuitous relief, but most of the work was generally done by the village officers. Village committees helped in management of some of the small works.

I do not think unpaid non-official agency could be employed on large works or more than it was in relief by dole.

111. I cannot answer this question adequately from memory, but I may state generally that I think we treated the people fairly leniently throughout and made no changes leading to disorganization or wandering.

112. I could not answer this question adequately without experience of the state of things obtaining in the years succeeding a famine.

M. C. GIBB.

23rd February 1901.

Mr. R. B. Stewart, I. C. S.

Answers by Mr. R. B. Stewart, I. C. S., to questions drawn up by the Famine Commission, 1901.

PANCH MAHA'LS DISTRICT.

1 to 5. I was not in the district till the middle of September 1899 and I have no figures by me. The outlook at the beginning of the monsoon season was, I believe, good, the ordinary crop outturn during the previous year having been good, while the mhowra crop, which affords a means of subsistence to a considerable proportion of the population during the summer months, had been plentiful.

6. Both.

7. As stated above I was not present until September when works had been started, but there could be no question that so total a failure of the rainfall as occurred in 1899 required the prompt institution of measures of relief among a people so poor and so improvident as the Bhils and Kolis.

8. Test works had been opened by the Local Boards when the failure of the monsoon was pretty well established. The result of opening these test works showed that means of subsistence must be found for a considerable number of people, and when I took charge of the district, two regular relief works, one in Godhra Táluka and the other in the Jhálod Mahál, were in progress. The tests applied were willingness to come to the relief camps and work for code wages. Tasks were not at first strictly exacted, supervision being very lax. An alteration from task to piece-work produced an immediate exodus of labourers, but in a very few days most of the people returned and the numbers were very soon as high as before the change. An inspection of the people in their villages also showed at once the necessity for relief.

9. (*a*) Lists of relief works were ready, though not to an extent sufficient to meet the distress which subsequently ensued.

(*b*) The works on the programme were located and surveys and estimates had been prepared for the larger works to be carried out through the agency of the Public Works Department. One considerable item of the programme was the repairing of a number of small village tanks. A list of these tanks with figures of probable cost was kept in the Collector's office, but no regular estimates had been prepared. In most cases surveys were very little required as the work consisted of clearing out deposits of silt,

(*c*) The programme did not include scales of establishment necessary to meet any emergency

nor were there any lists of candidates qualified for famine service. There had been no famine of any severity for a very great length of time.

10. I have no copy of the original programme of relief works, but to the best of my recollection the large works entered were calculated to give more employment than the small, though the village works far exceeded large works in numbers. Subsequent additions to the programme consisted almost entirely of large works, the programme of village works being retained and a few of the works taken up late in the year when it was desirable to get the people back to their homes.

11. I am unable to speak positively in the absence of records, but I believe the commencement of test works and the opening of Government forests were almost simultaneous. They were at any rate the first measures taken. Kitchens were started on works as soon as the works were opened and transferred with the workers when the latter were sent to a new work : village kitchens were not opened until the monsoon of 1900.

When regular works had been started and it was found that people were coming into the towns in varying degrees of distress, poor-houses were opened. The first was opened at Dohad in January and others at each of the head-quarter towns as soon after as possible.

It was not found possible to secure any efficient organization of private charity. Attempts were made everywhere to induce the leading inhabitants to give up indiscriminate almsgiving and establish regulated poor-houses, under their own control or form committees to expend their charitable funds in conjunction with the officers of Government in the Government poor-houses, but the success met with was very small and in many cases the flow of charity was checked when the Government poor-house was established.

12. (*a*) Each táluka was divided into circles and to each circle was appointed a Circle Inspector whose duty it was to see that people knew where work could be got, to put on the dole list those who could not go to work and to send wanderers to the poor-houses when these latter were established. These Circle Inspectors were sent out directly the failure of the monsoon was certain and their number was increased as soon as men were obtainable. Orders were also issued to all village officers reminding them of their duty to succour all persons in distress whether residents of their own villages or wanderers. The Circle Inspectors worked at first directly under the ordinary Mámlatdárs and subsequently under special Mámlatdárs and Awal Kárkuns deputed on famine duty. All district and táluka officers were from the beginning inspecting in their own charges, the establishment being strengthened in the hot weather by the loan of European officers of various departments, the deputation of several native officials of the Forest Department

and the employment of a few non-officials. These officers supervised the distribution of village relief and the management of village works when these were started.

(*b*) There was practically no local employment for labour. In one or two instances, the merchants of well-to-do villages were induced to employ people in improving their village tank, but the works were small and funds soon exhausted.

(*c*) See answer to question 11.

(*d*) See (*a*).

13. Loans were issued at the outset under Land Improvement and Agriculturists' Loans Acts, but to a very small extent. They were issued on the ordinary conditions to persons applying for them, and chiefly for deepening wells and buying appliances for irrigation. They were recoverable.

14. Irrigation wells can be made and are made throughout the district, though more in the west than in the east, partly on account of the nature of the country and partly because the eastern portion is almost entirely inhabited by Bhils who are not a hardworking race.

The digging of new and deepening of old wells was everywhere encouraged and a considerable number was brought into use but by no means all possible. Where the wells were worked, the crop was secured, but in the majority of cases I should say no permanent improvement was secured as the land is naturally so fertile, and rainfall so good, that the ordinary rainfall suffices for the small needs of the people and very many of the wells will soon fall into disuse. I do not think these wells afforded any appreciable employment for labour. Most of the wells were not built up, and after being dug out by the cultivator and his family or partner were worked with cheap rough appliances.

15. The first works were road repairs undertaken by the Local Board and supervised by the Local Board Mestries (overseers).

16 & 17. I have no details.

Large Public Works.

19. Large Public Works. At first the construction of new roads.

20. The works were managed by the Public Works Department. That Department will supply details in answer to this and the next two questions.

23. Admission was free to all willing to work. No system of tickets was attempted. No distance test was insisted on. Compulsory residence was attempted but had to be given up as unnecessary and impracticable, unnecessary because the need for relief was so general and undoubted that no such test was required, and impracticable partly because of the difficulty of getting sufficient hutting materials and partly because the nature of the people is

such that too many conditions merely cause them to leave the works, while the great difficulty is to get them to come on before they are too much reduced by bad feeding to be able to work.

24. Excluding relief labourers from outside the district, of whom there was a considerable number, including some who travelled from work to work, I think 15 miles is about the longest distance the Bhils and Kolis will go for work. There are, of course, exceptions such as where a man has relations on a particular work or where people move with a road work away from their homes, but as a rule very few new-comers arrived from villages more than 10 miles away.

25. No. The Officers of the Public Works Department were not subordinate to the Civil authorities. The Executive Engineer was independent so far as the professional management of the work was concerned, settling the alterations of tasks, drafting of workers, opening of new works, &c., in consultation with the Collector. Kitchens on works were managed entirely by the Special Civil Officer and hospitals by the medical officer, but otherwise the Public Works Department Officer in charge had complete general control of the work.

26. There was a Civil Officer for each work. Civil Officers were taken at first from the clerks in the head-quarter and táluka offices. Subsequently when more European officers were obtained, some of them were put in charge of works as Special Civil Officers and two non-officials were also obtained from the M. A. O. College, Aligarh, and similarly employed.

The salaries given to clerks employed as Civil Officers were from Rs. 30 to Rs. 40. Those to the superior officers subsequently employed varied from Rs. 125 to Rs. 525 as the pay of a subaltern *plus* staff allowance. The Civil Officer worked with the Public Works Department Officer in charge, but neither as his superior nor in subordination to him except in so far as his weekly diary was sent through the Public Works Department Officer.

With regard to paragraph 426 of the Report of the Famine Commission of 1898, the Civil Officer supervised the payment of wages, but did not himself pay labourers, that duty being performed by cashiers of the Public Works Department. He also supervised the hospital and sanitary arrangements in co-operation with the medical officer in charge. The other points noted were always regarded as peculiarly the duties of the Civil Officer.

In connection with this question, I would like to say that I found I was wrong in thinking that clerks on Rs. 30 or Rs. 40 could adequately discharge the duties of a Special Civil Officer. We employed men of this class in Násik in 1896-97, but the famine there was far lighter and the people easier to deal with. I think it would always be best to have an European in charge of a large work, but if this is impossible I would never again employ men of lower status than that of Awal-kárkun and Awal-

kárkuns must be selected for the work. It very rarely happens that a mere clerk has sufficient influence or is sufficiently reliable generally for the satisfactory discharge of the duties.

27. No. It rested with the Public Works Department Officer in charge. The Civil Officer reported to the Collector if he considered the task too heavy.

28. A gang consisted of 50 labourers on the average and as far as possible people from the same village worked in the same gang. It was not possible to insist on any fixed proportion between men, women and children as the people could with difficulty be got to work except with their friends. No special arrangements were made or required to secure village or family gangs. Bhils insist on working with their friends and relations and the difficulty is to induce them to separate so that the weaker members do not put too heavy a burden on the stronger to make up the task for the gang or drag the stronger members into gangs, the task of which is really too light for them.

30. I do not think any distinction is needed between men and women in the same class. Our labourers were classified as recommended by the Commission of 1898, the able-bodied males being in Class I and their women, if able-bodied, in Class II. No further distinction was required nor, so far as I am aware, was any difficulty experienced by the want of further distinction. Men unable to do the full task were put into Class II with the women without objection.

31. In the beginning the task system was adopted, but my first inspection, made with the Executive Engineer, showed that there were very many able-bodied people on the works who, owing to the lack of efficient supervision, were doing practically nothing. I then instituted a system of piece-work for labourers with kitchen relief for their dependants, the piece-work rates varying for professional and other labourers so as to enable workers to earn the full code wage for task work *plus* the Sunday wage and to prevent their earning more. Subsequently Government ordered the re-adoption of the task work system. The two systems were not carried on simultaneously.

32. I do not think the system of payment by results is unsuited to conditions of actual famine so far as the workers are concerned, but I would insist on children and dependants unable to work being fed in kitchens. The only people who really did full tasks under the task work system at the worst stage of the famine were people who had been working for months and would have done it under the piece-work system. The existence of a minimum wage has, I think, a most demoralizing effect, and I have seen people—who did not know they were being watched, but knew they would get enough for a meal of sorts however little they worked—take twice the time over a piece of work that they required when spoken to without any harshness or severity

whatever. The idea that Government will keep everyone alive whether he works or not, spreads or is spread only too quickly ; and while it induces the most intolerable laziness amongst workers, it has another effect amongst people like the Kolis, in that it leads many able-bodied people to leave the works or not to go to them until they are in a state of distress which prevents their working and not infrequently a state of emaciation, recovery from which would require far more treatment and nursing than is practicable in a famine. The belief that Government will only save those who will help themselves would, if fostered from the beginning, spread equally quickly and with far better results. The codes lay down that able-bodied people are to be required to give a fair day's work for a fair day's wage, but the system of a minimum wage seems to me to prevent the realization of this principle in practice. The methods pursued in recent famines would probably induce people to wait on in the belief that Government would give in and revert to the system of task work with a minimum wage under which a man can drag along with the minimum of labour and the mortality would probably be high for a time, but I believe the eventual result would be good.

At the same time I do not think the weak or infirm should be allowed to suffer for the laziness of their relations, and I would, therefore, have all dependants fed in kitchens, so that the able-bodied man who preferred an empty stomach to a proper task should not be allowed to cause his child or aged parent to also go empty.

33. The task was graduated. Allowance was not made for the distance workers had come. Subsequent changes were in the direction of greater leniency as it was found that the people were not doing full tasks and most of them, especially the Bhils, are not habituated to continuous labour.

34. The full code wage was unnecessarily liberal for the class of people we had to deal with and it was modified so as to let ordinary workers earn a living wage, while good workers could earn a little more than was absolutely necessary. Those who began early and worked steadily were in good condition and very fairly clothed all through. Some of them undoubtedly saved money on their earnings and personally sold grass at Dohád to Bhils, who told me that they had saved on the relief works the money with which they bought it. Copper coin returned freely to the Banias on the works and was obtained from them by the cashiers.

35. A rest-day wage was given. I have no definite facts in support of either a separate rest-day wage or an increase of the full wage so as to include it, but my general experience is that the system of higher week-day wages is better than a Sunday wage. The ordinary labourer is quite accustomed to supporting himself on holidays out of his earnings on other days, and the number of relief workers who absent themselves without any special allowance on the Holi holidays is enormous.

36. I do not agree with a minimum wage at all. As I have stated above, we have taught people to believe that Government are bound to keep them alive and a system of payment purely by results would most probably involve a high mortality at first, but in the long run it would, I believe, be best. The money which is now spent in paying minimum wages to people who do not earn them would be far more profitably spent in providing an increase of efficient European supervision.

37. There was a minimum wage except during the time when the piece-work system was in force. Later on there was a penal wage below the minimum, but there was never any tendency to fine down to it nor was it anywhere the wage generally earned.

38. Payments at first were supposed to be made weekly, but they were often irregular. With Bhils, I think, it is essential to have daily payments as they are most improvident people and would generally not eke out a lump sum given them once a week. For three or four days they would feed and drink well and then starve till next pay day with necessarily a gradual physical deterioration.

39. New comers were paid daily. I do not think payments weekly or bi-weekly threw the people seriously into debt with the Bania because the Banias gave very little credit.

40. Payment was made to the head of the gang at first, to individuals afterwards. There can, I think, be no question that payment should always be made to the individual worker. The people are very careless and easily frightened into paying a proportion of their wages to their mukádams or gang kárkuns, but there is less chance of their losing much when individuals are paid than when a lump sum is handed to the mukádam who distributes it with the aid of the kárkun after deduction of a considerable percentage. There were several instances in which mukádams had received the earnings of their gangs and gone off with them. I have known cases in which people were defrauded when individuals were paid, but this requires the connivance of cashiers and kárkuns as well as carelessness on the part of the labourer.

41. The Executive Engineer will give these figures.

42. The system of piece-work we adopted approximated most closely to the Gorakhpur system (paragraphs 199 and 209 of the Report of the Famine Commission of 1898). It differed in that there was no maximum limit imposed on the quantity of work to be done or paid for. It is not clearly stated in paragraph 199 how dependants were treated in Gorakhpur, but presumably as in the rest of the North-Western Provinces under the system of piece-work followed there, viz., the workers were expected to maintain their dependants, the Collector being allowed a discretional power of giving non-working children a ration of cooked food. Under our system we fed all non-working children and infirm depend-

ants and employed weakly people on work which could not be given by the piece, such as duties in connection with the camp and kitchens, dressing earth on the road-way, &c. The able-bodied labourer had thus only himself to support. He could do as much work as he pleased, but his earnings were practically restricted to the code wage by adjustment of rates. Thus supposing a man to dig 100 cubic feet and a woman to carry 50 cubic feet per day and the code wages to be 2 annas for a man, 1½ anna for a woman and 1½ anna Sunday wage, the full earnings for the week should be 12 annas for the man, 18 annas for two women and 4½ annas for the three for Sunday, total 34½ annas, for which they should dig and carry 600 cubic feet, giving a rate of 5 annas 9 pies per 100 cubic feet. A fixed proportion of diggers and carriers in a gang was not insisted on, people working with their relations or fellow-villagers as they pleased. In the absence of records of previous famine works in the district, the amount of work which could reasonably be expected was a matter of experiment. We had some gangs of professional Marwádi stonebreakers who for a week or two earned considerably more than the maximum code wage, and their rate had accordingly to be lowered, while that for Bhils and Kolis who were not accustomed to that class of work or to steady labour had to be increased.

43. The piece-work rates were, as just explained, adjusted so as to allow people to earn as a maximum wage for each working day the full code wage *plus* one-sixth of the rest-day wage. Children were fed at kitchens attached to the works. Weakly persons were as far as possible employed on tasks which are not susceptible of measurement, such as camp cleaning, &c. When this was not possible, they were given piece-work at favourable rates. The latter is, I consider, preferable to task work with a minimum wage.

44. Contractors were never employed.

45. Yes. Muster rolls were kept up. They were required for the weekly reports to Government.

46. The scale is fixed by Government. Wages were based on the price of bájri and maize, which is the grain usually consumed by the Bhils. The table is given in Appendix V to the Bombay Famine Relief Code.

47. When a new work has been decided on, the first step is the selection of a camp site. Wells are then dug or deepened as may be necessary, huts for labourers and establishment, hospital and kitchens erected and areas marked off for natural purposes. If the new work is to replace one completed, the Civil Officer proceeds there from the old camp with his establishment and dead stock as soon as the kitchen arrangements are completed, Banias being either sent on from the old work or new men appointed by the Mámlatdár of the táluka. If the new work does not replace another, Banias are arranged for, cooking utensils, &c., brought and a

Civil officer and, if possible, a Medical officer appointed. The Civil officer then erects a flag outside his quarters to which all new-comers are directed. There he receives and registers all new-comers and sends them with a note to the Public Works Department officer in charge who allots them work either with existing gangs if there are only a few, or separately if the new-comers are themselves numerous enough to form a gang. Small children and infirm dependants are detained at the kitchen. Cooks, water-carriers, scavengers, &c., if not transferred from the work closed, are selected in proportion to the number of workers and dependants and guards appointed over all sources of water-supply as well as for camp, kitchen, &c.

Directly it is decided to open a new work for which no Medical officer is available in the district, information is given to the Sanitary Commissioner who deputes an officer, if available elsewhere. The officer deputed reports himself to the Civil Surgeon at head-quarters and receives a supply of medicines and appliances with which he proceeds to the work, indenting from time to time for further supplies as required. In case of a transfer of workers, the Medical officer proceeds with his supplies to the new camp, either taking his patients with him or sending them to a hospital nearer than the new camp as may be found most expedient. When no Medical officer is available, the Civil officer has, as a rule, a few simple medicines and arranges for cots, blankets, &c., for sick persons.

The portion of the question relating to tools and plant, measuring up work, and making payments, will be answered by the Executive Engineer.

48. Tasks were stiffened or relaxed by the Executive Engineer in consultation with the Collector who reported to the Commissioner. Wages were not altered without the orders of Government. I do not remember any case in which orders altering tasks were overruled.

51. People were not drafted from large public to small village works. Small works were opened at the commencement of the monsoon season when it was desired to get the people back to their homes or as close as possible. The conditions were necessarily different from those of the large works, as piece-work only was practicable, and there was no minimum wage. The works did not attract many people from large works.

Small Village Works.

52. See answer to question 10.

53. Excavation and improvement of village tanks.

54, 55. They were conducted under the direct management of the Civil Agency through the village officers.

56. No. People were employed on piece-work at rates fixed with reference to the price of grain

prevailing at the time. Admission was, as far as possible, restricted to the people from the villages close by, *i.e.*, under the village accountant, who was placed in charge of the work or neighbouring villages where there was no work. Several works were started in each táluka so as to cover the whole area as conveniently as possible.

57. There was no selection of applicants within the limits mentioned in the last answer. Any one willing to work at the rates offered was allowed to do so.

58. I think not. The people who worked on the village tanks were chiefly people who wanted some assistance, but were not sufficiently distressed to accept the conditions of large works, while people who had left their homes and gone to the large works did not show much tendency to forsake them for village works.

59. Except towards the end of a famine I do not advocate small works. They might be useful in the beginning as a means of collecting people for draft to large works, but they would probably be swamped by people, who, though beginning to feel the difficulties occasioned by a restriction in the demand for labour, can still well travel to a large work, and unless the amount of work available on small works were very large, it would be exhausted before the time when it is most wanted. During the height of the famine, I think it is most necessary to spare the supervising establishment as much as possible and not to require its members to be always running about from village to village, checking small works, and without constant supervision abuses are only too frequent and the work most uneconomical. At the end of the famine, however, something must be sacrificed to the necessity of getting the people back to their homes, and I think small works should be taken up then as much as possible.

Special Relief.

60. The population of the Panch Mahâls District consists mainly of Bhils, Kolis and Naikdas or Dhankas. None of them are so little civilized as to be unaccustomed to regular cultivation, and some of the Kolis are well-to-do men with considerable land and numbers of cattle. The majority of them are however intolerably lazy. It cannot be said that the ordinary system of relief works is not suitable for either the Bhils or the Naikdas of the Panch Mahâls. It is difficult to get them to work steadily, and especially difficult to get Naikdas to go any distance from their homes, but many of them did go and continued working for months. They are by no means forward to take relief, and in framing a new famine programme for the district, I would certainly endeavour to find works as near their homes as possible. There is no objection to employing them on large works when they can be got to them either directly or by gradual drafting.

61. Forest works were utilized as far as possible, but the amount available was small. No

fodder work was possible. Such forest work as there was, was controlled by the Divisional Forest officer and served Bhils and Naikdas.

62. No.

63. } No. There were no classes requiring such
64. } special relief.
65. }

66. About 1,000 cattle were sent to Thána where there was grass available. I have not figures with me, but the mortality amongst them was high, though less, I believe, than among cattle sent from richer districts, as those sent by us were hardier and accustomed to harder conditions of life than the ordinary agricultural cattle of Ahmedabad, Broach and Kaira. I should not call the experiment a success. The expense is great and the result not so good as could be obtained by a large importation of grass for sale at very low prices.

All Government forests were thrown open to grazing at the beginning of the famine and afterwards people who had cattle which they could not support while earning a livelihood for themselves were put on the dole list so as to enable them to spend their whole time in collecting all available fodder.

67. Grass was imported as fast as possible but the railway arrangements appeared to be very inadequate. The Local Boards of the district are too poor to be able to import fodder themselves so that all grass brought in was brought at Government expense. The people did not take readily to it at first but when through the assistance of the Charitable Relief Fund, we were enabled to sell it at the nominal rate of Rs. 2 per 1,000 lbs. it was eagerly bought up, and far more could have been sold had it been obtainable.

Gratuitous Relief.

68. On large public works dependants were relieved by cooked food. On small village works no special relief was given to dependants, they being supported by the working members of their families.

69. The question presumably relates to gratuitous relief on works. If so, with the exception of a few payments for children in arms, gratuitous relief was entirely in the form of cooked food. This is in accordance with the provisions of the Bombay Famine Code and is undoubtedly preferable to cash payment as it secures regular meals to those who cannot care for themselves.

70. It was not intended that the distribution of village relief should go beyond the limits described in paragraph 141 of the report of the Famine Commission of 1880, but it must be admitted, I think, that it did do so at the end of the hot weather and for some months afterwards. In the beginning the native officials were distinctly illiberal and there was very little relief given in villages, and the result of fresh instructions was to cause them to go

too much the other way so that many people who were perfectly capable of earning their own living were put on the dole lists. Such persons were of course struck off by superior officers when inspecting, but this took a long time and the laxity shown by the lower officials in many cases added to the lists by inducing people to leave relief works and return to their villages under the belief that every one who applied would be put on dole. The recipients of village relief were certainly selected by persons with local knowledge as they were chosen as a rule by the village officers, but private interests and predilection were allowed too often to have an influence, and Circle Inspectors who were immediately over the village officers could rarely be men with any length of local knowledge. There was in the beginning and in most villages throughout no attempt to insist on a cooked food test. About June village kitchens were started and in most cases the acceptance of cooked food was a condition of relief, but the kitchens were not a success owing to the difficulty of getting trustworthy persons to manage them, and the want of sites, the villages being mostly small and without large buildings, and in most cases without Banias shops, and so on. In the ordinary way the test regulating admission to the dole list was sickness or infirmity, youth when the parents could support themselves but not their children, or special reasons for remaining at home such as the possession of one or two bullocks or cows which the owner would not leave or could not feed unless his own food was first assured.

71. There were 5 poor-houses opened in the district. The first opened was at Dohad in January, and others were opened as soon after as huts could be erected. The people in them were mostly wanderers collected on the roads or in the towns in which the poor-houses were established. I have not complete figures with me but the average from April 7th to June 9th was 3,369 daily, just over 1 per cent. of the total population. A considerable proportion of these consisted, however, of outsiders not belonging to the district.

72. Yes. Vagrants and immigrants were sent to the nearest poorhouse and thence if able to work, to the nearest relief work. People who refused to work on relief works were not sent to poor-houses as a punishment. I do not remember any case of a man absolutely refusing to work. Such people did not go to the relief camps. In many cases people were allowed to leave the poor-houses at their own request to go to a relief work, and did not do so, or were drafted and absconded on the way. They were generally found begging in the towns very soon and were again sent to the poor-house.

73. Yes.

74. I have no figures by me.

75. Food was distributed twice a day, once in the morning and once in the evening. People were required to eat their food on the premises.

76. As a rule civil kitchens were not opened close to relief works. There was no exact limit of distance fixed, the villages in which kitchens were established being selected in view of the trustworthiness of the village officials or village committees and the practicability of securing supplies.

77. All wanderers in need of food were supplied at the kitchens. Otherwise admission was restricted to persons on the dole list.

74 (*a*) The nominal poor-house ration was as laid down in the Bombay Famine Relief Code. Rice, bájri and maize were the grains chiefly in use. The medical officer varied the amount given to any individual as he considered necessary and also varied the grain from time to time.

75. (*a*) The village gratuitious relief lists were drawn up by the village officers and Circle Inspectors. They were checked by special awal kárkuns, Mámlatdárs and divisional officers. Circle Inspectors were expected to examine recipients at least once a fortnight, and once a week if possible. Other officers had no fixed times but were constantly inspecting and checking.

76. (*a*) Payment was made in grain where possible but owing to the paucity of shops some payments had to be made in cash. Persons on the list received their grain nominally every day, but, as a matter of fact, I believe at varying intervals up to a week. For those able to come to the Bania's shop, payment was made there and the village officers were required to see that those unable to attend duly received their ration.

77. (*a*) The only case I can remember is that of the owners of cattle mentioned above (question 70). I have no note of the actual date of the Government Resolution authorizing this. It was continued until rain had fallen and grazing was available. The necessity is explained above *viz.*, to enable people to preserve their cattle and to keep them alive when they would not leave the cattle and without the dole both must perish.

78. Brahman cooks were employed when possible; otherwise members of the highest caste contributing to the persons in receipt of relief. Yes, there was distinct reluctance on the part of Brahmans, Rájputs and Patillias to accept cooked food in village kitchens. A few Kolis also objected owing to the example set them by higher castes, but they did not persist in their objection. The higher castes objected directly the kitchens were opened but in most cases a little firmness, with such concessions as allowing them to sit apart, induced them to give in. Of course no man was required to eat food cooked by a member of a lower caste.

79. The village officers were in charge of the kitchens. They were supervised in this as in other branches of their work by Circle Inspectors, Awal Kárkuns, Mámlatdárs and Divisional Officers, while their accounts were checked in the táluka treasuries.

80. Cheap grain shops were not opened by Government. There were one or two opened by private merchants, and the Missionaries in the district also sold grain at cheap rates.

81. I do not think such cheap grain shops as there were had any effect on the importation of grain or on general prices. They were not sufficiently numerous for that.

Suspensions and Remissions of Land Revenue.

82. I have not exact figures with me. Up to the end of the revenue year no definite remissions had been made. Such revenue as could be obtained without harshness was collected and the collection of the rest was suspended.

83. The general capacity of the individual to pay was taken into account. This was determined on the information of the village officers coupled with such knowledge as the district officials possessed.

84. No definite orders of suspension were issued before the end of the year.

85. There are no Zemindári tracts in the district.

86. No. I do not know what the final orders of Government regarding remissions and suspensions were.

General.

87. For a considerable time the numbers on relief of all sorts largely exceeded 15 per cent. of the population of the district, but it must be remembered that the district is nearly surrounded by Native States from which we received a number of applicants for relief. The number of actual workers exceeded the percentage named, and considering the dislike of most of the people to discipline and steady work, especially during the hot weather, the only reason I can ascribe is the severity of the distress.

88. I think we might with advantage have had two or three more works so as to give the people less distance to go from their homes, particularly the Naikdas in the south, and, as I have stated above, gratuitous relief was stintingly distributed by the táluka officials in the beginning, but otherwise relief generally was not defective. In the later months village gratuitous relief was excessive, admissions being far too liberal.

89. The relief workers were generally ordinary labourers and small land-holders. The number of large land-holders, excluding inámdárs, is small and consequently the proportion of holders (occupancy tenants) to mere labourers was large. I have no figures by me.

90. My previous famine experience has been in the Násik District in the famine of 1896-97. I do not consider that the people of the Panch Maháls, looking to their general poverty, were really as ready to come on relief as the people of Násik would have been under the same circumstances. They would accept relief if taken to them but it was difficult to induce them to seek it.

91. I think there is no doubt that private credit was very largely contracted. It was, of course, difficult to get definite evidence, but the general report was that Banias refused advances or dealings on credit till another harvest was assured. The majority of people certainly exhausted their own resources before seeking State relief, even to the. dismantling of their huts and the sale of the materials.

92. There was hardly any question of people seeking relief when not in need of it save possibly in the matter of loans of money. Some people did apply for loans which they did not really require, but, speaking generally, the distress was so deep and widespread that there was no need to devise means to prevent any one applying for relief.

93. I do not consider any method of selection, such as tickets certifying to the necessity of the applicant, desirable, as such methods merely induce bribery or hardship. With good supervision the Code tests are quite sufficient.

94. Births and deaths on relief works were recorded by the Special Civil officer, in poor-houses by the Superintendent. The number was reported weekly, and it was supposed to be kept distinct from the records of vital statistics of the villages in which the work or poor-house was situated, but in practice this was not carried out, the village accountant generally registering all events occurring within the limits of his village.

95, 96, 97. These questions will be answered by the Sanitary Commissioner, but I would offer one remark. I do not think the diseases which occasioned the very high rate of mortality which prevailed in the district could be ascribed to insufficient food given in kitchens or poor-houses; in fact the opinions of several officers with whom I discussed the matter was that the Code ration was generally too high for people coming in in anything like an advanced stage of emaciation. They had been so reduced by unsuitable and insufficient food before coming for relief that they could not digest the Code ration, and if the full amount was given them, very many contracted diarrhœa or dysentery and died in a few days. This view was strongly held by the late Mr. Mulligan of the Irish Presbyterian Mission, who was a very careful observer and worked for months among the Bhils, being in charge of a large poor-house at Jhálod till compelled to give up work by the breakdown of his health. The remedy would be by an increase in the number of Medical officers and nurses, a remedy unfortunately unobtainable under present circumstances.

98. The grain shops were regularly inspected by the Special Civil officer and also by visiting officers. Inferior and unwholesome grain was found from time to time.

99. Very little. In the ordinary way the flowers of the mhowra tree and the juice of the toddy palm afford a considerable means of subsistence to the

poor classes of the district in the hot weather, but this year both failed. There was a good deal of cheap beef consumed by some classes.

100. Yes. There was a good deal of immigration. Figures, so far as could be obtained, will be furnished from the Collector's office, but they must be accepted with caution as it was extremely difficult to get people to admit that they came from Native States, there being a general belief that, if they did so, they would be sent back, and in many cases it is to be feared that the arrangements for relief in Native States were inadequate.

101. Here again exact figures are difficult to obtain, but undoubtedly the proportion of deaths among immigrants was very high as they wandered in in a very emaciated condition. Mr. Mulligan told me in August that he was astonished to find how many more of the villagers than he expected had turned up in the villages in Jhálod. The only thing possible was that a large proportion of the deaths recorded in that part of the district, and the rate of mortality was at times more than 100 per cent. per annum of the census population, was amongst immigrants.

102. Some orphans were handed over to Missionaries before the end of the famine. I was not present right up to the end, in fact, the end has not come yet, but it was in contemplation to hand over as many orphans as possible to any friends who would claim them and the rest to Missionaries.

103. I have no suggestions to offer. I have never found any need for relief from the Charitable Fund which could not be met under the classification given in the paragraph quoted.

104. I heard no complaints regarding want of carriage for grain. Regarding fodder there were many complaints of the insufficiency of carriage and the high bribes which had to be given to station officials to obtain trucks. In the Panch Mahals we could have disposed in June and July of a far larger amount of fodder than the railway authorities were able to bring us.

105. There were no such complaints until rain had fallen in July 1900. After that there were complaints, not so much against the works as against the village dole lists in which village officers and Circle Inspectors were too ready to enter people who could easily have performed light field tasks such as weeding.

106. I have no figures and have had no knowledge of the district except during this famine.

108. The only points which I can call to mind as showing departures from the provisions of the Relief Code are as follows :—

(*a*) New-comers were given food in the kitchen instead of wages before beginning work. This was, I think, sound as it ensured a meal to them, while

it prevented people from applying for work, receiving advance wages and then absconding.

(*b*) Civil officers were not given magisterial powers. Such powers were not necessary, and in the beginning the men appointed were not fit for them.

(*c*) A special wage known as the Broach rate was introduced under the orders of Government. I thought it was too low and reported accordingly and Government altered it.

(*d*) The Code lays down that the rate of wages on small works shall not be less than the minimum Code wage prescribed in Section 109. Owing to the lack of supervising staff, however, it was found necessary to carry out village works on the piece-work system, which was found quite satisfactory, as with fair rates people could earn the Code wage.

109. Yes. Staff Corps officers were employed. We had no officers of the Native Army or Non-Commissioned officers of the British Army, but we had officers from various other Departments, *viz.*, Forest, Salt, Post Office, Customs. I obtained two very good non-officials from the M. A. O. College, Aligarh, and would recommend the indenting on such institutions. The men are particularly useful in the Bombay Presidency as they are of a different class from our workers and Subordinate Establishment, and while showing sympathy are not so liable to be led into slackness by personal or caste feelings.

110. Missionaries were practically our only non-official helpers, and too high praise cannot be given to them. Two died of diseases contracted on famine work and a third was made seriously ill and had to give up work for a time. As Superintendents of poor-houses they were invaluable. There is ample room for an extension of non-official assistance, especially in village inspection and relief, but the material available is very scanty as yet as the number of native gentlemen, both able and willing to take up the work, is very small.

111. I regret that I have no details which would render my opinion on these points of value.

112. No.

In conclusion, as I am unable to appear before the Commission, I would like to mention two points, one of difficulty and one in which I made, I think, a mistake. The first is that of the scarcity of medical men—a want which is well-known but can hardly be too often pointed out. In distress such as we had we ought to have been able to select only medical officers and not take any one who could show a mere qualification. As it was we could not get men for all works, and in some cases were obliged to put up with men who deserved instant dismissal for gross neglect of duty for no others were obtainable. Good men with trained native nurses would have been the greatest possible boon.

The second point is regarding the payment of kitchen expenses. I thought it would simplify matters if the accounts were checked in the Public Works Department Account Office, and payments made by their cashiers, but I came to the conclusion that it is better to have a separate grant. The latter course entails more work on the already hardly worked táluka officials, but the Public Works Department officials do not regard the kitchen as an integral part of their work, and the accounts are inadequately checked. In another famine I would pay kitchen expenses directly from the táluka.

R. B. STEWART, I.C.S.,
Late Collector of the Panch Mahals.

7th February 1900.

Mr. W. W. Drew, I. C. S.

Replies by Mr. W. W. Drew, I. C. S., Collector of Bijápur, to the questions drawn up by the Famine Commission.

1. The estimated outturn of the principal crops in the district for the two preceding years was—

	1897-98. Annas.	1898-99. Annas.
Khárif—		
Jowári	6	6
Bájri	6	7
Paddy	6	6
Rábi—		
Jowári	5½	9
Wheat	6	8
Gram	8	9
Cotton	4	6

normal crop being 12 annas. The 1897-98 season was therefore a bad one ; while 1898-99 was fair.

2. The khárif sowings (427,916 acres) of 1899 were not up to normal (877,353 acres). 48·77 per cent. of the normal area was sown. The normal cultivated khárif area has been deduced from the actual areas sown during the years 1893-94, 1894-95, 1895-96, 1897-98 any 1898-99. (1896-97 omitted, being a year of famine).

3. (*a*) The average rainfall of the district during the rainy season (June to November inclusive) is 26 inches and 40 cents., based on the actuals of 1892-93, 1894, 1895 and 1897. (1896 omitted, being a year of scarcity).

(*b*) The actual rainfall during the rainy season of 1899 was 15 inches 80 cents., representing 59·85 per cent. of the average rainfall.

(*c*) The rain ceased at the end of October 1899.

(*d*) The distribution of the rainfall from June to September 1899 and the average for the same period are shown below :—

Month.	Year 1899. Inches.	Cents.	Average for five years 1892, 1893, 1894, 1895 and 1897. Inches.	Cents.
June ...	1	96	3	77
July ...	0	41	2	97
August ...	1	12	2	97
September ...	11	89	8	46

4. The normal khárif area sown is (as mentioned in the reply to Question No. 2) 877,353 acres, and in ordinary years the whole of this area is supposed to be matured.

In 1899 the khárif area cultivated was 427,916 acres, of which only 118,606 acres was the area matured.

The percentage of the matured area in 1899 on the normal area comes to 13. This percentage supposes that there was a normal harvest over the matured area in 1899, which was not, however, the case. The actual outturn was 2⅛ annas, taking 12 annas to re-

present normal crops. Therefore the actual khárif harvest of 1899 represents 2·30 per cent. of the normal harvest over normal cultivated area.

5. The population of the district, according to the last census, is 796,339. The population is nearly entirely dependent on agriculture ; 76 per cent. are agriculturists and 24 per cent. are engaged in crafts and industries. The latter are generally dependent on agricultural prosperity, and if agriculture fails, both equally suffer distress. Twenty-two per cent. are cultivators and the rest (54 per cent.) are labourers.

6. Test works were first opened.

7. Failure of crops, and statements of persons that they could not get field work ; increase of beggars and emigration in search of work.

8. Road works opened as test works in various parts of the district.

9. (*a*) Yes.

(*b*) No. Lists of candidates qualified for Government service are kept, but not specially for famine service. Those entered are qualified for famine service.

10. Large public works are principal feature of relief system. There was also a programme of small village works with 63 works, capable of employing a total of 14,000 people for three months.

11. (*a*) Test work was first opened in August 1899. The Sanitary Boards were also asked to use their balances in providing relief works at Code wages.

(*b*) The first poor-house was opened at Bijápur in March 1900. Doles to incapables began in February. In July and August they were collected for the most part into poor-houses or kitchens and the doles stopped, except in parts where there were too few to open poor-houses or kitchens.

(*c*) i. Kitchens were opened on 11th January 1900 at Hortinimbal Road Relief Work. It was afterwards, on the 13th March, transferred to the Sangogi Tank, and has remained open ever since.

On 21st February 1900 at the Bádámi-Mudkav Road, and transferred on 26th May to the Bádámi-Guledgud Road. It was closed on 1st December 1900.

(*c*) ii. Nineteen poor-houses were opened. They were called poor-houses, but served more the purpose of kitchens. Very few, except those previously getting doles, resorted to them and scarcely any wanderers.

(*d*) A district fund was raised in January 1900. Its total receipts came to Rs. 12,000, collected mostly in the district, but partly in England. Rs. 8,000 were contributed to it from the Indian Charitable Fund. The bulk of this sum was spent on objects I and III and about 1,000 on IV.

11. (*e*) The Government forests were opened in the beginning of October for free grazing of cattle.

12. (*a*) The Code system. Early in February all the Circle Inspectors were specially employed on this duty. The village officers were authorized to give relief in urgent cases. In others the Circle Inspector's orders were necessary for entering a person on the dole list. The Mámlatdárs and Sub-Divisional officers and Collector supervised the lists on the spot, and added to it or struck names off it.

(*b*) Rs. 1,50,000 were given in tagái for works which would employ labour; nothing else was done towards stimulating its employment.

(*c*) Meetings were held in all the large towns to raise funds, and the Mámlatdárs collected wherever they went.

(*d*) The Code system through the various grades of Revenue officials, from village officers upwards. Weekly reports were sent.

13. About Rs. 1,50,000 were advanced under the Land Improvement Act, and about an equal amount under the Agriculturists' Loans Act. The former was given from the time when the distress first appeared until the commencement of the cultivating season; the latter afterwards. They were recoverable in whole, but doubtless most of those under the Agriculturists' Loans Act will have to be remitted.

14. Irrigation wells can be made nearly all over the district. I have heard of a few being dug from tagái funds in time to ensure the crop then on the ground. Under (*b*) and (*c*) they were successful.

15. The works undertaken were all in the famine programme. They were begun, some under the Revenue and some under the Public Works Department.

16. The tasks were the same as those laid down by the Public Works Department for regular relief works. They worked by gangs, except at stone-breaking. The same amount of work was required of each person in the same class, irrespective of sex or previous occupation.

17. Payment was in accordance with results. There was a maximum, but no minimum. No rest-day allowance and no allowance for dependants.

18. Large numbers coming on the work beyond its immediate vicinity.

19. Large public works.

20. The Executive Engineer of the district and a Special Famine Engineer.

Every one applying for work was given it. There was no delay in that respect.

22. The hutting and sheltering were not ready at the outset. Conservancy and sanitation arrangements were rough and ready at commencement, but on the only really large work, Sangogi Tank, were soon got into good order. There was little difficulty

anywhere as to food and water-supply, as places where the latter was likely to be bad were avoided. There was usually delay in erecting hospitals and getting Hospital Assistants.

23. Admission was absolutely free. No tickets were ever required. No distance test was required. Residence on the works was never made absolutely complusory, but in practice all, except those whose houses were within a mile or two, lived on the work.

24. This depends entirely on the extent of the distress. In Bijápur two large works served for the whole district. Many persons travelled 40 miles from places in the district. There were others from outside the district who came even further. Lately some have gone that distance from one work to another, which is more popular.

25. On the two works the Special Civil Officer was subordinate to the Public Works Department officer in charge. The Executive Engineer is subordinate to the Collector under the Famine Code, except in strictly professional matters. In practice the question of what matters he was independent never came up.

26. There was a Special Civil Officer to each work. At Sangogi the Special Famine Executive Engineer was in charge of the work, and the Special Civil Officer, a Staff Corps Captain, was subordinate to him. At Bádámi a Public Works Department overseer was in charge, and the Special Civil Officer was a clerk from the Mámlatdár's office and was subordinate to him. It was part of the Special Civil Officer's duty to be present at payments and inquire into complaints, and he was fully authorized to bring anything in the way of short measurement or want of punctuality in payments to the notice of the Public Works Department officer in charge, or through him to the Collector. The Special Civil Officer at Sangogi kept a complaint book, in which all such complaints were at once referred to the Executive Engineer in charge.

27. No. This was left to the Public Works Department official in charge, but the Special Civil Officer could make representations.

28. The gangs were about 30. It was left to the people. As much as possible their wishes were complied with. No attempt was made to gang villagers together if they did not want it. Those from the same village arriving together would actually be placed in the same gangs. Persons arriving and wishing to be ganged with relatives, who had previously arrived, usually had their wishes complied with after the next pay day.

30. There were complaints from men about being classed with women and attempts were often made by the workers to keep unprotected women out of their gangs. It was a general idea that wages were lessened by a large proportion of women.

31. The Code system was introduced at the outset. Piece-work was attempted for a few weeks but was a failure.

32. In this district the distress was never very acute, but it would not have been safe to do without a minimum altogether. As it was, many who could earn only the minimum left the works in search of other employment and had to return.

34. Copper coin had frequently to be sent out. It did not return quickly to the Banias. People did save on the works and had food sent out from their villages periodically. The wage is liberal enough.

35. A rest-day wage was given.

36. The penal minimum was not too low for this district.

38. Payments were made weekly. At first they were twice a week.

39. But new-comers were paid daily at first. Also arrangements were made with Banias to supply food on credit, and they were present at the time of the payment of wages, and took their dues then.

40. To the individual. While for a short time payment was made to the head of a gang; it led to constant complaints and waste of the time of the staff in inquiring into them.

44. No.

45. Muster-rolls were always kept up, even when piece-work system was tried.

46. The price scale was given by the Special Civil Officer at first and afterwards by the Mámlatdár. It was based on jowári, except for a short time after the bájri harvest, when it was based on bájri. Small variations were neglected.

51. No.

52. There are 63 such works in the famine programme, but only two were opened, both tanks, as test relief works. They attracted people only from the neighbourhood and were closed after five or six weeks, as not being required.

53. The works in the programme are repairing and cleansing tanks and small roads.

54. They were conducted by Civil agency under direct management.

59. This famine was hardly enough to go upon, but I consider large works are so much easier to supervise and to prevent fraud upon.

60. Not many, and no special measures were required.

61. No.

62. No.

63. No. They were relieved to a certain extent from the Charitable Fund.

64. They did not go on ordinary relief works, and managed to live without Government assistance. Their trade was never absolutely stopped.

65. None were taken.

66. There was no exceptional mortality among cattle. There was a fair supply of karbi, and the forests were thrown open for free grazing.

67. No.

68 (*a*). In kitchens with cooked food, except toothless children, for whom one pice extra was given to the mother.

70. Village relief was restricted to those classes enumerated in Section 57, Famine Relief Code. (I have no time to send for copy of Famine Commission Report of 1880.)

71. There was only one poor-house at Bijápur, opened in March 1900. The numbers were never over 100 before the end of the year. All classes attended it except Bráhmins. There were Lingayets, Mussalmans, Lamanis, Mahárs.

72. To a very small extent did vagrants and immigrants come to the poor-house. People were not sent from works to it, but able-bodied were drafted from the poor-house to the works before the monsoon.

73. Twice a week all persons able to work were sent from the Bijápur poor-house to the Sangogi Tank.

74. None before the monsoon. One in June, six in July, nine in the beginning and three in the middle of August. They were called poor-houses, but they were really poor-houses. They were to server for a radius of 5 miles.

75. Meals were distributed twice a day, except, I believe, at one or two, where the whole day's supply was given in the morning. The times were fixed for each kitchen, and food given at those times. They were compelled to eat it at the kitchens, except when too ill to attend, and then it was sent to their houses.

76. No kitchens were opened very near the relief works, which were very few in number. The nearest to the Sangogi work was about 7 miles.

77. At first only those were admitted who had been getting village doles. Then village officers were empowered to admit others in reduced condition, pending sanction of superiors. Later on the Superintendents were directed to admit all applying from outside villages, while the Circle Inspector's order was required for inmates of the village itself.

74. The poor-house ration of jowári (or bájri after the khárif harvest), dál, salt, ghi, &c. Special ration was given for women after childbirth. Rice was given to invalids instead of jowári at some kitchens. At others extra jowári instead of some of the condiments.

75. The village officers, helped by the village panchayats. Circle Inspectors supervised; also Mámlatdárs, Sub-divisional officers and Collector.

76. The payments were made—

(*a*) in grain only;

(*b*) in some places daily, but usually weekly in advance ;

(*c*) in some public place in the recipient's village.

77. To no other persons, except persons temporarily ill or reduced in condition.

78. Lingayats and Maráthas. At Bádámi there was reluctance at the opening of the kitchen among all but the very lowest classes to send their children to take cooked food, but it lasted only a few weeks.

Lingayats nearly always objected, and Brahmins always, to take cooked food at kitchens.

79. At first village officers were in charge of the kitchens, but were later mostly replaced by residents or candidates specially engaged, mostly Brahmins. There is a committee at each village. Elaborate accounts are kept. The inmates are constantly seen and numbers checked by Circle Inspectors and Mámlatdárs, Sub-divisional officers, and Collector.

80, 81. No cheap grain shops.

82. 3,00,000 out of 14,00,000 were suspended. Orders as to remission have not yet been made.

83. Both upon failure of crop and general capacity of individual. Information was chiefly that of village officers, and determination by the Mámlatdárs, subject to Collector's confirmation.

84. After the collections began.

85. No Zamindári tracts.

86. I have had very few petitions for suspensions, which were not granted, and none of undue hardship in the collections of revenue. Distraints were only about sixty in the year.

87. The district population is about 8 lákhs. The largest number on relief at any one time was 25,000 in last week in April, or $3\frac{1}{8}$ per cent.

88. There was not so much relief from private subscriptions as in 1896-97, even comparatively to the state of the distress. The more respectable among the poor, who would neither go on works or take dole, may have been hit harder. But I think all relief contemplated by the Code was given sufficiently. Nor do I think that too much was given at any time. Most of my Mámlatdárs considered that more village servants should have been given dole to keep them at home.

89. Small proprietors, persons accustomed to take land on yearly lease, agricultural labourers, artizans and others.

90. Relief was given very freely in 1896-97, and at the beginning they flocked very freely to the works, and also demanded dole. Many left the works after finding that they had to work hard to get more than the minimum wage.

91. It was generally stated that loans could not be obtained. Weavers especially complained that

no advances were made to them. Usually people exhausted all their resources before going on works.

92. All, except for village relief, and a distance test.

93. I consider that they should be required to attend at kitchens situated in central villages. Selection leaves too much to Subordinates. For relief of Pardanishin women this is, however, indispensable. Distance test is very necessary. At a work in their own village, some would come in the slack time of any year.

94. The ordinary village system. The village officers are responsible, but not the house-holder.

95. I have not found high mortality anywhere, except where there was either plague or cholera.

96. There was a severe outbreak of cholera at Sangogi. Altogether there were 303 cases and 194 deaths reported, and others were concealed. It was introduced from Indi, and at Indi from Sholápur.

At other places permanganate is used, but only once or twice. No special intervals are fixed. At imported places once a week.

97. On the Sangogi Tank there were trenches and large numbers of scavengers. Great care was taken to prevent the workers obeying calls of nature where they liked, and this they considered a great grievance. The water-supply was carefully guarded, and there were water-drawers and carts. There was a Staff Corps officer there as Special Civil Officer for supervision.

At Bádámi the water was guarded and drawn by a special staff. There were no trenches, but the workers had to go a certain distance from the works or camp.

On some of the test works there were trenches and scavengers.

At the Bijápur poor-house there were latrines and sweepers.

At the kitchens on the works the arrangements were the same as for the workers.

At the other kitchens there were water-drawers, but no sanitary arrangements.

98. The Special Civil Officer inspected the grain, and the quality maintained was good. One contractor was dismissed on a really unfounded complaint of supplying bad grain, and I reinstated him.

99. Igli, turbi and bantak and malbandi were eaten to a considerable extent. The effects on their health is not much.

100. I used to see many beggars from Rámdurg and Játh States, but they did not come on to the works much.

101. I cannot tell.

102. There were no famine orphans.

104. No complaints as to importing. The Southern Marátha Railway could have run many more

trains if they had been required. But during the months, August to November, when the state of this district was good compared with others, and there was a very large export, there were complaints as to time grain was left lying at stations.

104. (*a*) I had returns from the Railway weekly. I believe they were reliable.

105. I had no such complaints.

106. There has been a tendency to sow more food-crops, and to sow as much land as possible with the early crop, which is almost always food-grain, in order to get it earlier. The lands will not bear double cropping, except perhaps in 1 per cent. of lands. Garden land is increasing, and land irrigated sufficiently to bear double crops. In parts of the district the more valuable crops are being sown to a larger extent than before.

107. Payment of wages in cash is the rule in the district, but during the famine years, owing to smallness of stocks and dearness, payments in cash have become very common.

Cash wages have fallen from 3 annas a day to $1\frac{1}{2}$ on average.

108. No. Unless the substitution of cooked food in kitchens for relief in each village is so considered. I consider that was justified as affording an automatic check.

109. One Staff Corps Officer as Special Civil Officer on the Sangogi Tank. No Non-Commissioned were employed.

110. There were committees to supervise doles and kitchens. They sign the dole bills. No frauds were discovered. At the large towns there were committees for collecting subscriptions, but they were not much used in the distribution, which was done chiefly by the Mámlatdárs. The village committees in times of acute distress might be given authority to enter persons on dole register. At present they are advisers only. They might also be employed more to supervise the distribution of food at poor-houses and authorize admissions.

112. I believe at Sangogi the clerks and subordinates and the gaugers were guilty of a good deal of immorality with the women on the works. Several instances came to light. There was nothing heard of among the workers themselves.

W. W. DREW,
Collector.

Indi, 13*th January* 1901.

B 1400—3

Mr. C. G. Dodgson, I.C.S.

Replies by Mr. C. G. Dodgson, I.C.S., Collector of Sátára, to the questions drawn up by the Famine Commission.

1. The outlook in the Sátára District when the rains of 1899 commenced was fairly good.

The rains of 1896 had been very unsatisfactory, and the western half of the district had suffered from famine in 1896-97. The rains of 1897 were below the average, but there was no famine at the end of that year. The rains of 1898 were on the whole good and by the middle of 1899 the people in the west had to a great extent recovered from the famine of 1896-97 and those in the rest of the district were in their normal condition.

3 (*a*). The rainfall of this district varies very much in different parts. The following table represents the average fall of 5 years prior to 1899 in five places and replies generally to three heads of the question:—

	Average fall.		Fall in 1899.		Percentage.
	In.	c.	In.	c.	
Sátára	42	80	20	44	48
Waduj	19	57	13	94	68
Dahiwadi	21	47	12	66	57
Tásgaon	27	29	14	63	52
Karád	33	24	14	62	43

4. The actual kharif harvest of 1899 represented a percentage of on a normal harvest.

6. The fact that crops failed raised suspicions as to the necessity for relief. Repeated applications from the public strengthened these suspicions. Proof of necessity was required by tests.

7. Failure of crops, reports from local officers, an unusually large emigration to Bombay (large numbers go to Bombay and other places annually from this district), an immense number of petitions for relief, an increase in the number of beggars and in the number of cattle taken to the markets for sale led me to think that the machinery of relief should be set in motion.

8. The first relief measures undertaken were test works as contemplated in the Famine Code. These took the form of repairs to roads and metal-breaking. The people were paid solely by results. No relief was given to their children and other dependants, no hutting accommodation was pro-

vided on test works and in some cases they were required to go to a distance from their homes. In the absence of a distance test, it was found that people would crowd on to a work close at hand without any intention of really working, but merely in order to earn a few pice. A distance test of, say, 10 miles was sufficient to weed out many of the persons who were not in real need of relief. When the number of people on a test work grew to approximately 2,000, and people were found to remain on the work, the need for regular famine relief was held to be established and the work was then converted into a regular relief work.

9. (*a*) According to the famine relief programme a list of works was ready, and surveys and estimates of cost were for the most part complete. Further surveys and estimates were promptly pushed on.

(*b*) The relief programme did not include scales of establishment necessary to meet any emergency. Lists of candidates qualified for famine service were not kept up.

10. The programme contemplated large public works as the backbone of the relief system. A few small works were on the programme, but they were never undertaken and a regular programme of village works was not kept in reserve from the beginning.

11. Owing to the failure of rain, fodder soon became scanty and Government forests were opened to free grazing in the month of September 1899. In the month of September 1899 the first test works were opened; such test works continued to be opened from time to time throughout the hot weather of 1900, *i.e.* up to the end of May, in different parts of the district.

The first regular relief work was opened in the month of December 1899, and other such works followed at intervals until the end of the hot weather; as soon as a regular work was started, a kitchen was at the same time opened on it.

There were only 3 poor-houses in the district. Two were opened in July, one in June. Each poor-house had a kitchen attached to it.

There were no other official kitchens. Private charity was never organised on a large scale in the Sátára District. A well managed private kitchen was started in the month of January 1900 at Tásgaon and another similar institution was started at Shirala in the month of April 1900.

12. (*a*) Village relief in the form of the village dole as contemplated in the Famine Code was first started in December 1899, and the system gradually extended as scarcity became more acute. The ordinary staff of Agricultural Circle Inspectors was increased in the affected tálukas, both by drafting men from non-affected parts and by engaging additional men. These men were instructed to neglect their regular agricultural work, such as boundary mark inspection, surveying, &c., and to pay special

attention to the condition of the people, by examining the birth and death registers, the crops (where there were any), the water supply, the dole registers and the people's general physical condition. To each such Circle Inspector was allotted a group of villages and he was required to visit each at least once a week, to place on the dole those who required this form of relief, to strike off those who did not require it, to induce people capable of working to go to the relief works.

These Circle Inspectors worked directly under the orders of the Táluka Mámlatdár or the Mahálkari. In some tálukas where distress was severe, a Special Aval-Kárkún was appointed. He looked after the Circle Inspectors and did the same kind of work as they did. He sent his weekly diaries through the Assistant or Deputy Collector in charge of the táluka to the Collector.

When a District Medical Officer was sent to the district he travelled all over the district and gave much attention to the general condition of the people.

The Mámlatdárs in their tálukas, the Mahálkaris in their Maháls, the Assistant and Deputy Collectors in their sub-divisions, and the Collector in the whole district gave their attention to the above subjects. In hilly parts where owing to the want of shops the village dole has to be distributed from certain fixed centres, the Famine Aval-Kárkún was required to be generally present at the distribution. The Collector and the Sub-Divisional Officers and Mámlatdárs held public meetings at different places with a view to organising local charity and collecting subscriptions for the purpose.

13. Loans under the Agriculturists' Loans Act (XII of 1884) and the Land Improvement Act (XIX of 1883) are made every year in this district. During 1899-1990 the same system prevailed, more money than usual being advanced.

From October 1899 to November 1900, the sums advanced were under the Agriculturists' Loans Act for seed and cattle Rs. 2,01,850, under the same Act for maintenance Rs. 27,763¾, under the Land Improvement Act Rs. 2,91,851. Under this latter Act the advances were chiefly for deepening old or sinking new wells.

The recipients almost entirely belong to the agricultural classes. Under the terms of Government Resolution No. 2444, dated 2nd June 1900, half the amount of loans made for seed and cattle for kharif cultivation in 1900 may be remitted. Otherwise the loans are recoverable in whole.

The loans are advanced in some cases at 5 per cent. interest and in some cases free of interest (see Government Resolution No. 2650, dated 28th June 1900.)

14. Irrigation can be made almost everywhere in this district. The depth below the surface of water varied very much in different parts of the

district at the end of the rains of 1899. Probably 30 feet was an average depth. The digging of wells was encouraged by means of loans under the Land Improvement Act, and such wells were successful in many cases in securing the crop on the ground and as permanent improvement. The digging of new wells also implied a permanent improvement. Taking Rs. 400 as the cost of the labour in a new well, and 20 labourers as the number required, every new well may be said to have given relief to 20 people to the extent of Rs. 20, *i.e.* enough for one person to live on with comparative ease for say 7 months.

15. The works first undertaken were road repairs and metal-breaking. These, especially the former, were ordinary District Local Works and were paid for from Local Funds as long as they were test works. When they were converted into regular relief works, they were paid for from Provincial Funds. From the outset they were under Public Works Department supervision.

17. Payment was in strict proportion to results on test works. There was a maximum wage, and no minimum wage; there was no rest-day allowance or allowance to dependants on test works. These allowances were given on regular works.

18. Please see reply to question 8.

19. Large public works were alone opened in this district. There were no small village works.

20. These works were under the control of the Public Works Department. The scale of supervising establishment had, I believe, not been prescribed in advance. There was as a rule no delay in opening such works beyond what was necessary for the selection of a suitable site for the camp, kitchen, &c. Tools and plant were generally either available at once or procurable after a short time.

21. Works were not divided into charges. Each work was in charge of one man. It was at times necessary to limit the number of workers on a particular work; when this number was exceeded, as was occasionally the case, the excess people were drafted elsewhere.

22. Each charge or work (the terms are synonymous here) had its own establishment. This consisted of a Public Works Department officer in charge, who was either an Engineer or Assistant Engineer, an Overseer or a sub-overseer with a staff of cashiers, and other subordinates. Mustering kárkúns were appointed to supervise from 4 to 6 gangs each; each gang consisted of 50 (approximately) labourers, of whom one was the makadam. Other Public Works Department officers were employed as required. Information on this point is best procurable from the Public Works Department officers.

The kitchen was managed by a Special Civil officer with a clerk and peon and a staff of cooks and nurses as laid down in the Famine Code.

The Hospitals were managed by a Hospital Assistant (when available) and Compounder with

the help of ward boys. The sanitary arrangements were looked after by a Sanitary Inspector, who supervised the work of the "bhangis" and watchmen whose duty it was to prevent people from fouling the country and to insist on them going to the appointed places for purposes of nature.

Watchmen were employed to guard the banks of streams in order to prevent people from fouling the water or drinking except at the appointed places.

Every well had from 1 to 4 men whose duty is was to draw water and distribute it to the people, no one else being allowed to touch the water.

No arrangements beyond those laid down in the Famine Code had been prescribed *beforehand, i.e.* before the opening of a relief work.

23. Admission to the works was free to all persons, no system of selection being tried at any time. A distance test was enforced on some occasions where a rush of people who apparently were not really in need of relief seemed to render this necessary. Ten miles was about the average; but there was no general rule on this subject. Residence on the works was nominally compulsory but never really so partly owing to the difficulty of providing sufficient hutting material in time and partly because on road works the site of the camp was constantly shifting.

24. A work capable of entertaining 10,000 people would, in my opinion, serve an area of 200 square miles. Persons in need of relief went about 15 miles or even more in search of it. But the proportion of persons coming from say within 5 miles was very great as compared with persons coming from longer distances. The reply to this question depends greatly on the intensity of the distress and the character of the people. Timid hill people will probably not go more than 4 or 5 miles from their homes.

25. All local officers of the Public Works Department were subordinate to the Collector, except in matters of a purely technical character. The Executive Engineer, who was in direct charge of all the relief works, always worked in consultation with me and met my wishes.

26. There was a Special Civil Officer on each work. He was always a native; excepting in two instances, he was a clerk whose permanent pay was from Rs. 25 to 50 a month. As Special Civil Officer he received Rs. 50 a month; in some cases he received a further conveyance allowance of Rs. 15. He was technically immediately subordinate to the Public Works Department officer in charge of the work; but as a matter of actual practice was virtually independent as regards the management of his kitchen and poor-house. He had full authority to assure himself that measurements were punctually and correctly made and that all the points noted a the end of paragraph 426 of the Famine Commission's report of 1898 were being attended to, except

the submission of accounts and reports by the Public Works Department officers which were not held to concern him. His position in this respect was somewhat anomalous, because he was supposed to be checking the work of his superior officer; but no difficulties arose in actual practice, though I consider that they would be likely to do so in the case of a Civil Officer and a Public Works Department Officer who did not pull well together.

27. The Special Civil Officer would not have been justified in deciding on such a question. He would have been expected to refer the matter to the Public Works Department Officer in charge of the work, and on failure to get what he considered a satisfactory decision, would have had to refer the matter to the Assistant or Deputy Collector or the Collector.

28. The gangs were made up by the Public Works Department Officer in charge and consisted of a certain number of each of the three working Classes I, II, and III. Each gang consisted as nearly as possible of 50 workers.

There was, I believe, no regular system of making up village or family gangs; but as a matter of practice village gangs were very common; because the people generally came on to the works in batches from the same villages and it was therefore found more convenient to put a batch of people from the same village into the same gang. The constitution of village gangs was popular with the labourers and probably led to a better outturn of work.

29. The wage scale adopted was that given in Government Resolution No. F-538 of 5th March 1900 and Government Resolution No.F-2215 of 19th October 1900. Previous to the issue of the former Government Resolution the scale laid down in the Famine Code was followed. The classfication of labourers was the same as that recommended in paragraph 445 of the Famine Commission's Report of 1898.

30. Women are best placed in class II and able-bodied men in Class I. Very few women are fit to be put into Class I, except sometimes at stone breaking, which is of the nature of skilled labour. A powerful man unaccustomed to stone breaking will often find greater difficulty in completing a certain task than a physically inferior woman who is accustomed to this form of work.

It may be argued that it is not fair on a woman to give her the lower (class II) wage because she is not physically capable though perhaps willing to try to do the Class I task; but it seems to me that the average woman probably requires less food and can manage to live on a lower wage than the able-bodied man and that there is no hardship in leaving her to her 2nd class wage.

To give a Class II worker the Class I wage, merely because she happens to be a woman, would lead to unnecessary expense.

31. On test works payment by results was adopted, in so far that the Code task system was enforced without a minimum wage. For a period of nearly one month the Code system with a minimum wage (*i. e.* the penal minimum of 9 chataks) was adopted on regular works, but it was subsequently abandoned and the system then followed was virtually a system of payment by results; for practical purposes and to facilitate calculations no one was fined below a minimum equivalent to 3 chataks. Two systems were not carried on simultaneously in any two places or on the same work, except in so far that new-comers were treated more leniently during their first fortnight than others who had been longer on the work.

32. I am of opinion that in a district like Sátára a system of payment by results can be worked satisfactorily throughout actual famine, and, that, if started in time and if properly supervised, relief can be adequately afforded by works conducted throughout on a system of payment by results. The whole question to my mind depends on the people. If people will not go to relief works until they are seriously reduced in health and too weak to work properly, it is possible that strict payment by results without a minimum wage may fail to give relief. I have no experience of famine work among such people. In this district the people crowd on to the works with the greatest readiness, and it is quite the exception to find people staying in their homes until they are actually emaciated. Except for a period of less than 2 months, payment by results was the practice in this district throughout the recent famine and the system worked well. The actual system of payments adopted is shown in a copy of a Circular issued by the Executive Engineer in April 1900 and attached to these replies. The system was virtually the Code task work system with a 3-chatak minimum.

Very strict orders were given that the people on the works must be constantly and regularly inspected. Whenever a person was found to be in reduced condition, he was at once removed into Class IV and maintained at the poor-house attached to each work, there receiving the gratuitous ration or hospital ration according to his condition, in exchange for no work or only nominal work. A short rest generally enabled him to pick up again and he was then again taken on the work. I have worked out the percentage of persons in this 4th class as compared with total number of people on the work for 7 works during May and part of June. The figures varied on one work from 1·3 to 2·7; on another from 1·7 to 4·5; on a third from 2·2 to 5·4; on a fourth from 3·3 to 8·5; on a fifth from 4·1 to 15·8; on a sixth 4·4 was the percentage for the only week examined. On none of these works do the figures show any steady deterioration in the condition of the people. On the contrary, every one who saw the works in the Sátára District was agreed that the people were in good condition. In connection with these figures, it must also be borne in

mind that the Class IV people were not all people who had been removed from the working classes, but consisted mainly of old and decrepit people, many of them permanently relieved in the poor-house. On one work did the percentage in the 4th class rise considerably, going up from 10·2 to 21·5 per cent. in 4 weeks. The physical condition of the people on this work undoubtedly deteriorated. I attribute this chiefly to wilful unwillingness to work and partly to the people being of worse physique than those in other parts of the district, and consequently finding the tasks set too hard for them. Had the work not been closed early, the task would have been reduced.

This particular work had to be closed early in June owing to the rains approaching, as it was situated near the hills, and it is therefore impossible to say what effect on the people a protracted course of this system would have had. But there is no doubt whatever that on the other 7 works in this district the system worked satisfactorily and no evil results ensued, the people continuing in good health. Those who had no resources worked fairly hard and earned a fair wage; those who were idle and earned a low wage presumably had other resources and managed to keep in health on an apparently insufficient wage; at all events they were not an unnecessary burden on the State. I do not consider that the famine in this district was extremely acute at any time; but it was undoubtedly severe in some parts, especially among the poorer classes; but their readiness to accept early relief combined with a free use of the 4th class kept the people throughout in good condition in spite of the fact that large numbers of the labourers earned less than the minimum wage.

33. The task exacted at the outset was the task prescribed in the Famine Code, subsequently modified by Government Resolution No. F-538 of 5th March 1900 and No. F-2215 of 19th October 1900.

The task varied according to the particular class into which the workers were classified under the Famine Code. The full task prescribed for each class was expected from all; no allowance was made for the distance the workers had come, except as far as section 84 (*b*) of the Famine Code affects this question.

34. I consider the scale of wages adequate. I consider the minimum wage unduly liberal. Large numbers of our workers steadily earned much less than the minimum wage, but kept in health. (Please see my reply to question 32.) I can produce no evidence that workers saved upon their wages. But some of them undoubtedly had spare cash in their possession. On two occasions people on the works were able to pay for telegrams which they sent to me. I heard of 9 rupees being found on the body of a woman who died on a work.

35. A separate rest-day wage was not given. Each worker earned his day's wage plus one-sixth on account of the rest-day's wage. I prefer this latter

system as being the fairer one to Government. With the other system people would be likely to come on to the work say on a Saturday, get 2 days wages for one day's work and then go away, perhaps to return next week. The addition of one-sixth to the daily wage earned is easily calculated.

36. I consider the minimum wage too high, and as already explained in my reply to question 32, see no reason why there should be a minimum wage at all, penal or otherwise, at all events in a district like Sátára, where the people are naturally very thrifty and very ready to go to relief works. But with the system I advocate, energetic and intelligent supervision is necessary in order to afford prompt release from work of any one who may be falling into a reduced condition. In a country where the people are slow to go to the works and among people unaccustomed to regular work, such as Bhils and other hill tribes, a minimum is very likely necessary. Considering the large number of people in this district who earned less than the minimum wage and kept their health, I consider the 12 chatak minimum wage unnecessarily high. 9 chataks is probably high enough. But this too must vary in different parts of the country. The Deccani is a hardy person, constantly accustomed to scarcity. He can probably keep in health on less food than people who are habitually in comfortable circumstances and unaccustomed to poverty and self-restraint.

37. Please see my reply to questions 32 and 36. The penal wage (9 chataks) and even less was freely earned and people continued for a long time on the works earning these low wages. The statement attached to this report (see reply to question 41) has some bearing on this point. I attribute the continued earning of the low wage to unwillingness to work. It had little or no evil effect on the people (see reply to question 32).

38. Payment was made weekly. More frequent payments, say every 4 days, would be better for the people; but payments draw people from their work and thus interfere with the performance of their task.

39. During their first fortnight on a work, people were generally paid twice a week.

Payments at intervals of a week undoubtedly threw the people into the Bania's debt, and for this reason I would prefer to see payments made every 3 or 4 days. Weekly payments also tended to throw the people into their Mukádam's debt and the right to recover his money from them opened a door to blackmailing and extortion which many Mukádams were only too ready to avail themselves of.

40. Payment was made to each individual. I have no experience of payments being made to the headman of the gang, but I should consider the system as objectionable as it would give great opportunities for the headman to swindle the members of the gang.

41. I attach a statement giving information on this point. Many people remained for weeks together on the work earning less than even the penal wage. Presumably they had resources of their own.

43. The maximum wage was as laid down in Chapter VII of the Famine Code. Non-working children were relieved as laid down in the Famine Code, receiving cooked food on the prescribed scale. Weakly persons capable of some work were put in class IV (nominally worked) and paid in cash, their wage being always the equivalent of 12 chataks, however much or little work they did; their outturn of work was not measured.

45. Muster rolls were always kept up. The system here, though a system of payment by results, was virtually the task system with a very low minimum. The copy of the circular attached to these replies explains it.

46. The prices scale for each work were taken from the nearest market town, being reported every week by the Mámlatdár of the táluka. It was based on the price of jowári, the staple food of the district. Less than ½ lbs. were ignored, in so far that 16¼ lbs. were treated as 16 lbs.; 16½ and 16¼ lbs. were treated as 17 lbs.

47. I leave this question purposely unanswered, as Public Works Department Officers being more directly concerned than I was, can go into greater detail.

48. An alteration in the task or wage could be ordered by the Superintending Engineer (see Government Resolution No. F—538 of 5th March 1900). If, however, the Collector in a matter of this sort gave any order and acted in anticipation of sanction, he would probably seldom be overruled, unless obviously wrong.

51—59. There were no small village works in the Sátára District. I have had no experience of them.

60. There are no aboriginal tribes in my district.

61. A sum of Rs. 1,000 was placed at the disposal of the Divisional Forest Officer for employment of labour in forests. He employed 9,627 people in clearing forest boundary lines, paying annas 2 per man, annas 1-6 per woman, and anna one per working child.

No fodder works were opened; though many people obtained a living by cutting and selling to the public forest grass.

62. There was no such system, except in so far that a few trial shafts for private wells were sunk at public expense, the arrangement being that if water was found the owner would have to repay the cost of the trial shaft, tagái being advanced to him for the construction of the well (see Government Resolution No. 36, dated 3rd January 1900). The system was not much adopted, as the people did not apparently care for it.

63. No such special measures were taken or required.

64. Artisans were generally unwilling to go to relief works; but when really in need they went and as a rule were not physically fit for ordinary labour.

66. 26,423 lbs. of grass were imported from the forests of the Thána District. 99,250 lbs. of grass were taken from the forests in the Western Ghâts in this district. This grass was stacked at depôts and sold cheap, the price being eventually reduced to Rs. 5 and Rs. 3 per 1,000 lbs. according to the part of the district from where the purchaser came. When the prices were reduced, the grass was freely bought.

Villagers were induced to send their cattle to the forests in the Western Ghâts to graze. Some went, but a good many of these died when the rains set in in June. The total mortality among and loss by sale of cattle amounted to 16·17 per cent., but was chiefly confined to the more useless animals. Death from starvation was not very common.

67. Please see reply to the last question.

68. Dependants on large relief works were relieved by means of cooked food.

69. In villages gratuitous relief was given under section 57 of the Famine Code by distribution of uncooked grain. This system was adopted as being less likely to lead to dishonesty and fraud than a distribution of cash. For the same reasons poor-houses were opened in tracts where the village dole list seemed likely to be very high.

71. 3 poor-houses were opened in this district—one at Pátan on the 25th June 1900, one at Karád on the 8th July 1900, and one at Vita on the 19th July 1900. They were attended by only the poorest and to a great extent the lowest castes. The highest number at them at any time was: Pátan 552, Karád 481, and Vita 125.

72. The reply to both questions is No.

73. The superintendents of poor-houses had orders to constantly weed out the people who appeared well enough to go to relief works, and this was also done by inspecting officers whenever they visited these institutions.

74. There was a kitchen at each poor-house and a kitchen at each famine relief work, in all 10. Of these 7 were opened before the rains broke and 3 after the rains broke. There were no kitchens apart from these institutions. Any one within need of relief and living within 5 miles of a kitchen was expected to go to it.

75. The ration provided was that laid down in section 105 (*c*) of the Famine Code. Meals were distributed twice a day at fixed hours, *i.e.* at 9 A.M. and 5 P.M. People were not allowed to take their food away; they were compelled to feed on the premises.

76. No rule was laid down as regards this matter of distance. As Collector I decided where kitchens should be, and did so with regard to the existence of other similar institutions. None were opened close to relief works.

77. Admission to kitchens was free, in so far that any one might apply for admission. The superintendent of the poor-house had authority to refuse admission if he thought fit.

74. (2nd question.) The poor-house ration was that laid down in section 105 (*c*) of the Famine Code. Jowári was given at 2 poor-houses; náchni at the 3rd, that being the staple grain of that part of the country.

In case of sickness or weakness the Medical Officer used his discretion as regards varying the diet. He was generally guided by section 106, Famine Code.

75. The village gratuitous relief lists were in the 1st instance drawn up by the village officers. They were checked by the Circle Inspectors; the orders were that every Circle Inspector should visit every one of his villages at least once a week. They were checked and the people inspected at longer intervals by the Famine Aval-kárkún, the Mámlatdár, the Assistant or Deputy Collector, the Collector and the District Medical Officer, whenever one of these officers happened to visit the village.

76. Payment of village dole was always made in grain and daily at some suitable place in the village, such as a temple, chávdi, &c. In the western and hilly part of the country this system was impracticable owing to want of grain-dealers and the villages were divided into group, a weekly distribution of grain being made at the "centre," *i. e.* a selected village in each group. People who were too feeble to go to these distributing centres were allowed to send persons to fetch their grain for then.

77. Gratuitous village relief was given for about 3 months to some able-bodied people during the rains. These people left the famine relief works in order to start agricultural operations and for some time had nothing to live on.

78. The cooks were almost invariably Maráthas. No objection to take cooked food was shown except in the rare instances of a comparatively high caste person, such as a Sonár, a Lingayet, &c., wanting relief. These people were allowed to cook their own food.

79. Kitchens attached to relief works were managed by the Special Civil Officer attached to the work. Kitchens attached to poor-houses were managed by the superintendent of the poor-house. There were no other kitchens. Their work was supervised and checked by the ordinary revenue staff and in the case of kitchens at relief works by the Executive Engineer, the Public Works Department Officer in charge, and the Special Famine Officers, who were Europeans, and who were

specially employed for this purpose and for trying to check frauds on the works.

80—81. Cheap grain shops were not actually opened; but money was subscribed in 2 or 3 places for the purpose, and the knowledge that this was done tended to prevent Banias from unduly forcing up prices.

82. Out of a total land revenue demand for 1899-1900 of Rs. 19,24,763-5-2, Rs. 14,58,509-3-0 were collected, leaving Rs. 4,84,254-2-2 outstanding. No formal orders of suspension or remission were given.

83. In deciding whether to compel a man to pay his outstanding balance or not, his general capacity to pay was taken into account, the crop alone not being the sole criterion. That general capacity was in the first inquired into and reported by the village officers, checked by the Mámlatdár and then referred to the Assistant or Deputy Collector in charge of the táluka. Government had ordered that no attachments were to be made by order of anyone less than an Assistant or Deputy Collector, and these orders were on the whole carried out. Owing to some misunderstanding a few cases of distraint by subordinate officers occurred.

84. No suspensions or remissions were given before the date of the revenue instalment. The people were very slow to pay their dues and those in arrears were given to understand that they ought to pay. Some of those who could do so then paid; many who could and those who could not, did not pay; hence the outstanding arrears at the end of the year. The question of granting remissions to those who really cannot pay is now under consideration.

85. There are no true zemindari tracts here in the usual sense of that term. Inámdárs were not formally allowed suspensions or remissions of their quit-rent; but some of them, just as in the case of the ryots dealing direct with Government, have as yet failed to pay all their dues.

86. The system adopted here has, I think, worked fairly well. The people have as much as possible been given to understand that if they are able to pay they ought to pay and when they have not paid, care has been taken not to be harsh with them. The people here are always inclined to hold back their revenue and even in good years are often difficult to deal with. Arrears are undoubtedly due in some cases from people who are quite able to pay, and steps are gradually being taken to recover this money. Under a system which involves dealing separately with each individual, there must always be some cases of excessive leniency or excessive strictness, but on the whole the plan works well.

87. The number of persons in receipt of relief was at no time as high as 15 per cent.

88. I do not think that relief was at any time defective. If it had been, I should have heard

complaints, and the condition of the people would have deteriorated, which was not the case.

89. The people on relief works were almost exclusively agriculturists, by which I mean agricultural labourers and petty cultivators, who were mostly State ryots. I cannot say what was the proportion of agricultural labourers as opposed to cultivators or actual ryots. Very few artisans came to the works.

90. I have had no personal experience of any former famine, but was told that the people came on more readily than they used to; the explanation being that the motives of Government are now better understood.

91. Private credit undoubtedly was contracted. Moneylenders were very unwilling to lend money to people who had only very bad security to give. There was little or no crop on the security of which people would advance money.

92—93. A distance test commends itself strongly to me. In a district like this one, where there is no difficulty in getting people to go to relief works, such a test should, I think, be freely adopted. It is inadvisable among timid hill tribes. I do not consider any method of selection for admission to relief to be practicable.

94. In villages, births and deaths are registered by the village officers, the Mahárs being required to report to them. On relief works the Special Civil Officer is held responsible.

96. In the hot weather of 1900 cholera prevailed, there being 8,996 attacks and 4,869 deaths. Throughout the dry season of 1899-1900 efforts had been made to deepen wells and sink temporary wells in beds of streams; little more could be done once cholera broke out. In large towns attempts were made to prevent water being fouled by washing, &c. Permanganate of potash was not generally used.

97. Please see reply to question 22.

98. Grain shops at works were regularly inspected by the Special Civil Officer and the Public Works Department Officer in charge of the work and other officers who visited the works. It was rare to find unsuitable or insufficient food. No grain dealer was allowed to sell at a work without a permit, and this was only given to respectable dealers. This precaution was adopted in April.

99. When the rains set in in June, the people collected a considerable amount of wild fruits and vegetables. I am not aware that their health suffered in consequence.

100. The only Native States from which immigrants came to our works are small States consisting largely of villages scattered about in the Sátára District. Very few people came to our works. Probably not more than 1 per cent. of the people on our works came from those States.

102. Very few orphans were found. They were generally handed over to friends and relatives. Missionary institutions took about 50 or 60.

103. The classification of objects under the Charitable Relief Fund seems to me satisfactory. I believe in leaving the distribution of this Fund largely to officials, this lessens the chances of mismanagement.

104. I heard no such complaints. The local price of food was not raised by any defects in railway carriage.

104 (*a*). Every Station Master in the district reported to me every week the quantity of grain imported at his station. The statistics were, I fancy, reliable, but they were not checked.

105. I heard no such complaints.

107. Private employers largely pay wages in grain to their agricultural labourers. I do not think there is any tendency to substitute a cash for a grain wage. Among artisans cash wages prevail, and these cash wages rose during the famine.

108. The only noticeable departures from the provisions of the Famine Code to which I can point are (*a*) that suspensions of Land Revenue were not given before the date of instalment as contemplated in paragraph 137, and (*b*) that there was practically no minimum wage here. I have dealt with both these questions in my replies to questions 84 and 32, and I consider that the departures were justified.

109. One Staff Corps Officer, one Postal Department Officer and one retired Ordnance Officer were employed in supervision. No officers of the Native Army or Non-commissioned Officers of the British Army were employed. One retired Native Officer was employed in a subordinate position. I can suggest no other source.

110. Non-official Municipal Commissioners in Sátára superintended and managed the distribution of dole in the town of Sátára and worked very well. Two non-official poor-houses were well manged by non-official native gentlemen.

111. The minimum wage was first paid on the 25th March. It was abolished after a month, and on the 29th April the new system of fining below the penal wage down to 3 chataks was introduced. Just before the 25th March the numbers on works were—

20th	March	...	25,424
22nd	„	...	27,090
24th	„	...	27,236.

The numbers rose steadily, and on the 23rd April, just after the last payment on the minimum wage system, the numbers were 42,821; on the 28th April, the first day of the new system, they were 46,766.

The change in the system did not lead to any general reduction in numbers. For on the 9th May

there were 47,855 people on the works, and on the 19th May this number had risen to 52,156. On the 7th June there were as many as 50,421. After that date a fall in numbers set in and continued fairly steadily. It was due partly to resumption of agricultural work and partly to the fear of cholera, of which a few cases occurred on some of the works. Whether the institution of the minimum wage system was responsible for the great increase in numbers during the month of April it is impossible to say. But the abolition of that system did not lead to any reduction in numbers, though the increase then ceased.

Taking the only work on which the system followed here may appear to have not been a success, *viz.* the Tarla-Targaon Road, I find the following figures:—

20th March (no minimum system) ...	1,619
23rd March do. ...	1,684
1st April (minimum wage) ...	1,367
10th April do.	3,045
20th April do.	4,454
25th April (immediately after minimum wage payment)	5,255
1st May (no minimum)	5,481
8th May do.	5,248
15th May do.	4,262

The fluctuations appear to have fairly been regularly affected by the changes in the system of wages.

C. G. DODGSON,
Collector of Sátára.

Period week ending	Name of Work.	Approximate number of people on work.	Approximate number of people earning			
			Full wage.	Penal wage.	Between full and penal wage.	Less than penal wage.
13th June ...	Improving Tásgaon-Pingli Road.	5,600	100	1.150	2,350	2,050
„ ...	Improving Mayni Tank ...	6,000	1,250	800	2,800	1,150
„ ...	Constructing Nehr Tank Bund.	7,750	350	2,050	1,850	2,800
20th June ...	Improving Mayni Tank ...	6,000	1,250	450	2,350	1,950
„ ...	Tásgaon-Pingli Road ...	3,050	...	2,450	100	500
27th June ...	Mayni Tank	4,950	2,050	650	1,750	500
„ ...	Sátára-Pandharpur Road ...	3,500	...	500	100	2,900
4th July ...	Goregaon Tank	5,350	100	450	800	4,000

Note.—The above figures are only approximately accurate The figures supplied to me in connexion with this subject deal with gangs. I have converted them into people by multiplying each gang by 50.

C. G. DODGSON,
Collector of Sátára.

No. F. R.—1452.

Camp Mivar, 20th April 1900.

CIRCULAR.

As it is found that large numbers of people come on famine relief works content to do little or no work and receive the penal minimum wage.

The following orders are issued in supersession of orders given in $\frac{\text{F. R.}}{1027}$ of 23rd March 1900:—

2. The system at present in use simply be extended so as to admit of fining below the penal minimum.

3. The tasks should be those given in the accompaniments to G. R. No. F.—538 of 5th March 1900.

Two new classes will be added to the scale of fines given in G. R. No. 581 of 9th March 1900.

If 20 to 40 per cent. only of task is done, the wage will be the equivalent of 6 chataks of grain.

If less than 20 per cent. of task is done, the wage will be 3 chataks.

4. The fines will be as follows:—

Work done—full task.		Fines—*Nil.*
Between 100 and 75 per cent...	...	Half difference between maximum and minimum wages.
Between 75 and 50 per cent ...	...	Full difference between maximum and minimum wages.
Work done	...	Fine.
Between 50 and 40 per cent ...	...	Full difference between maximum and penal wages.
Between 40 and 20 per cent ...	...	Full difference between maximum and equivalent of 6 chataks of grain.
Below 20 per cent. ...	...	Full difference between maximum and equivalent of 3 chataks of grain.

5. Mukádams will get the ... ... are earned by the highest class working in the gang.

Then, if only 10 per cent. of work is done by file, Class I and Class II will each receive the equivalent of 3 chataks of grain and the Mukádam will receive the same.

If full task is done, Class I will receive the equivalent of 19 chataks of grain and Class II will receive the equivalent of 15 chataks of grain and the Mukádam will receive 19 chataks if there are any members of Class I in the file and 15 chataks if the file is composed of only Class II and Class III.

In a Class IV file, the Mukádam would receive the equivalent of 12 chataks of grain.

6. New-comers should be divided into class II and III for the first 3 weeks and the Mukádam should be entered as Class II.

New-comers should not be fined the first week and in the second and third week 25 and 10 per cent. of the fine should be remitted.

At the end of the third week those of the members of the gang who are suitable should be transferred to Class I and remissions of fines should cease.

7. There must be a Class IV file on every work without exception.

Even if the officer in charge of the works thinks the people are fit for Class II, he should nevertheless pick out the 10 weakest and oldest people and enter in a class IV file to form a nucleus of a gang, into which other people can be placed who are found to be weak or emaciated.

Great care must be taken to see that people who are really weak or old and unable to do a fair day's work are put in this gratuitous file. At same time care must be taken to see that idle people who can work, but won't, are not put in this file.

The Class IV or gratuitous file will be given a nominal task of half the task that would be demanded of a file composed of Class II and III, but they will not be fined even if they do not work to the task. The Muster Roll will be handed over to the Civil Officer for payment and will be entered by him in his returns.

These people in Class IV file should not be entered in Form XV.

8. This new system should come into force during the week commencing Sunday, April the 22nd, and the first payments on this system will be made on Sunday and Monday the 28th and 29th April.

9. On test works piece-works will be continued.

(Signed) D. GEORGE, C.E.,
Executive Engineer, S.D.

(True copy.)

C. G. DODGSON,
Collector.

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Mr. A. H. A. Simcox, I.C.S.

Answers by Mr. A. H. A. Simcox, I.C.S., to the questions drawn up by the Famine Commission.

1. The outlook was fair. The harvest of 1896 had of course failed almost entirely, but on the other hand there had been good crops in 1897 and very fair in 1898. An evidence of this is the fact that the cotton-ginning factories near Málegaon, which generally work for only about three months in the year, in the season of 1898-99 began in December and worked right on up till the beginning of the rains in June.

2. Yes. My charge depended almost entirely on kharif crops. The rabi sowings were confined to irrigated areas and to small tracts not far from the Ghâts and to a portion of the south of Nándgaon Táluka not far from Aurangabad. Otherwise rabi crops consisted mostly of linseed grown in certain blacksoil areas, and wheat and gram grown in moist hollows.

3. (*a*) About 22 inches at Málegaon. (*b*) Rather over 9 inches at Málegaon—say from ·40 to ·42 of the average. (*c*) Early in October. (*d*) The early rains were fair and encouraged sowing, but then there was an almost complete break all through July and August, accompanied by a strong drying wind. Some rain, which fell in September and October, came too late to save the crops.

4. Probably about 25 or 30 per cent. in the Ghát districts, and in the plain districts not above 1 or 2 per cent.

5. Having left the Málegaon charge in which I was serving through the 1897 and 1899 famines, I have not the materials to hand for answering this question.

6. It was known that relief would be necessary. There were test works opened, but they were rather useful in determining the best localities for relief works, the number of people to be expected, etc., than in proving the absolute necessity of relief.

7. The frequent applications for relief, the suggestions of influential persons, the abnormal number of beggars, the high prices, combined with my personal knowledge of the people and of their reduced circumstances since 1897.

8. Road works were first started. In the "test work" stage the work was paid for by the piece, and only those who actually worked got paid. This gave rise to many complaints, and before long it was evident that in most cases a man weakened by poor living could not support himself and family on his test work wage. Permanent relief works were started in my charge in the middle of December.

9. There was no doubt a famine programme ready, but it had to be modified at the last moment owing to the remarkable failure of the small streams. Camps could only be located near rivers or large streams from the outset. Surveys and estimates were ready except in the case of one large irrigation tank (near Mulher), which seems to have been forgotten by the Irrigation Department, though it would have been a most useful work as regards (i) the increase of permanent irrigation and (ii) the water-supply of Málegaon Town: (*b*) I do not think the famine programme included establishments. Certainly no lists of candidates were kept up. The appointing of the necessary establishments was left to district officers who were readily able to pick out likely men from those of their acquaintance. Any previous provision must have been miserably inadequate, for I remember my Collector telling me he did not expect to have more than about 45,000 on relief in the district, whereas at one time there were nearly 60,000 on two works close to Málegaon alone.

10. Large works were the backbone of relief on the programme. A programme of village works existed only, I think, in my own mind as regards my charge. I had to take short leave owing to circumstances beyond my control from August 25th—November 25th. As soon as I rejoined I sent in a list of small works, several of which later on proved most useful.

11. (*e*) In my charge (except the Ghát region) fodder failed very early, and as soon as August the forests were thrown open. The feature about the plain forests was the large number of ironwood (आंजन) trees, the foliage of which is highly esteemed for fodder. The gathering of the foliage employed many poor Bhils, etc., for several months and kept many cattle alive.

(*d*) On my arrival in November I found that the wealthier traders, etc., in Málegaon had already an organized system of private charity. They had imposed a voluntary octroi of annas 2 per cart coming into Málegaon with any goods of theirs, and they expended the money so collected on doles of grain.

(*a*) Test works were also started; I think at the end of October.

(*c*) (*i*) As soon as large works were organized, kitchens were started on them. The first in my charge opened on Christmas Day.

(*b*) Poor-houses were started in large towns about May or June. So far as possible I used to send people qualified for kitchen or poor-house maintenance to relief-work kitchens to save establishment. It was only in the rains that poor-houses were really useful.

(*c*) (*ii*) Up till the rains the poor Kokanis, etc., near the Ghâts managed to get a livelihood owing to the extraordinary demand there was for grass, which was only to be had near the Ghâts. The cutting and carting of this grass went on until

June. Then it perforce ceased and the hill people were very poorly off until their early crops came in. Several kitchens and cheap grain shops were opened in this part of the world, and while "dependants" could find food there, the able-bodied were provided for on small works near their homes.

12. (*a*) The staff of the Agricultural Department was used for this purpose and was specially increased. This object was combined with (*d*). The táluka and district officers also assisted, and special men of the rank of Head Clerk were appointed for tagái purposes, who also supervised work in this line.

(*b*) The condition of my charge was so hopeless that it directly operated against the local employment of labour, except in the case of gathering fodder. The farmers naturally turned off their labourers and worked themselves. All the hangers-on who usually get a livelihood by watching crops, weeding, reaping, etc., were unemployed, because no crops grew to any height, and the cotton mills stopped for want of cotton. Similarly there was no demand for the clothing woven in Málegaon, and large numbers of the Momin weavers either went to Bombay or returned to Upper India.

(*c*) Knowing my people as I did, I preferred to leave the organization of charity to them, merely suggesting personally to leading men that they should confine their attentions as far as possible to the deserving poor of their own neighbourhood, and not encourage promiscuous begging. My suggestions were on the whole loyally carried out.

13. Tagái was given in my charge for wells up till about the end of March, after which time it was improbable that wells would be in time to be of use. I have not the figures, but think the amount would be about ₹ 1,75,000 or so. The loans were recoverable in whole.

14. Almost every plain village in my charge had wells dug in it for irrigation during 1899-1900. In many cases they went dry either at once or before any crop came to maturity, but in most cases some sort of crop was raised. In one village alone 80 new wells were dug. The second part of this question is impossible to answer profitably in general. My charge was very uneven in contour. In parts 20 feet would reach water, in parts 60 feet would not. But I can safely say that the subsoil water has not been so low in level in the memory of any one now living. I have remarked above that tagái was largely given for wells, and so far as possible was restricted to lands where water would probably be found. I consider that the larger portion of the grant was useful under head (*a*), and no doubt under head (*c*). Generally a man would work himself with his family and friends—hired labour was the exception. As regards (*b*) I would say that I consider a great many, too many, wells were dug to last permanently. The Kunbis are essentially lazy, and if they can get bread out of a dry crop, as they usually

can, they will not trouble about well irrigation. Besides, I gave as small grants as possible, so as to spread out the money over as many recipients as possible, and knowing the people's temperament, not to burden them with heavy debts in the future. I used to tell them that they were only meant to use the grant to tide over the bad times in most cases; not but what grants were given for permanent wells in cases where they seemed advisable.

15. The test works were metal-breaking works on Local Board roads, but supervised by the Public Works Department. I do not know if the question of payment for them has yet been settled.

18. The obvious bad condition of the people, and the need for provision for dependants. Some people left the test works in despair of getting sustenance.

19. Large metal-breaking works on roads, and subsequently one large tank and the construction of two new roads.

23. Admission was free. No distance test was insisted on as a general measure. Sometimes it was found desirable to remove parties of Bhils, etc., who came from villages near the works to more distant works, as they would steal crops, etc., in their own jungle, whereas they would not venture out at night in an unknown country.

24. I do not think the late famine was one from which such questions as this can be accurately answered. The preceding famine was too recent, and the rush on works was so great that they rapidly grew to enormous proportions. Besides, the want of water, as I have said above, prevented the works being evenly distributed over various areas. Generally applicants for relief could get it under 20 miles from home. But the Khándesh District had a great name for providing work, as lately the Tápti Valley Railway had employed many labourers. In the early days of the famine many persons came from the Deccan to go to this Railway and of course were disappointed. Some of these were to be found about Málegaon on the works.

26. There was a civil officer on each work. Works were not divided into charges. The civil officers were of the rank of Head Kárkun, and got from ₹50 to ₹80 per mensem. They were as far as possible independent of the Public Works Department officials on the works. It was found that the works grew to so great a size that by the time the civil officer had done his own kitchen and sanitary work he had not much further time at his disposal. He checked a certain amount of musters, saw to the water-supply and burying ground, both of which required much supervision this year, and had no further time to go into questions of rates of payment and other technical matters. I do not remember a case last year in which the civil officer took the initiative in a question of this kind. As to the second part of the question the civil officers certainly had the authority but not the opportunity.

27. I never had a case of this kind brought to my notice.

28. Gangs were of 50 workers each under a mukádam. As far as possible the convenience of the people was consulted, those of one village or one caste keeping together. It was often necessary to put a foreign mukádam over them, their own friends being inclined to encourage shirking of work.

32. I consider that payment by results is unsuitable to famine relief works. The fact is that the people now know of the existence of works, and have no silly fears of being poisoned, etc. They also know that they will get enough to keep body and soul together. But they have a certain reluctance to go on works. After all it means leaving their village and their house for a very uncomfortable hut, and their natural indolent existence for one where, if they do not do much work, they are always being worried to do it. Also they always hold out as long as possible on the chance that some late rain will come and save some of their crops. In fact, they have, I believe, very much the same feeling as county people in England have about going "on the parish." But all the time they are hesitating they are probably pinching themselves, and the consequence is that they arrive in a condition so bad that they cannot earn a living by the work they do. Owing to this feeling I do not think I can assent to the last part of the question. It is my opinion that so long as famine relief payments are made on the principle of just keeping a man in good condition, it cannot be expected that he will work with any enthusiasm. Very few people work for work's sake, but rather that they may live comfortably afterwards, or may gain extra comforts at once. Were the payments by results to be such that they would enable the hard worker to save money or get any appreciable amount of extra luxury, they might work satisfactorily. But the famine works themselves are as a rule such that Government do not care whether they are finished or no, that is to say, they are started not for their own utility but for the purpose of giving relief. It follows that Government are not prepared to lay out extra money to get more work than necessary done. Moreover, the people know that Government have pledged themselves to keep them alive and not let them starve, and this encourages idleness in a naturally idle people. To put a case which would be the reverse of what always happens. Imagine the 60,000 people near Málegaon to have all worked as hard as they could on piece-work the whole time they were on relief. The already mountainous heaps of metal would have become veritable Alps, or might have excited the admiration of Cheops himself.

33. The only remark I have to offer is that new arrivals were given full wages for the first week or fortnight, if necessary, to improve their condition.

11,4

39. Weekly payment was universal. It was only during the week after arrival that complaints were general, and that only towards the beginning of the famine. Soon the Banyas began to know the mukádams and principal men of the gangs, and on proof that an arrival was a member of so and so's gang the necessary credit was generally forthcoming.

40. To the individual I prefer this system; otherwise the complaints become endless and the mukádam may develop into a mere slave-driver.

44. I found it profitable to employ a contractor for the kitchen food, who got up wheat flour from Bombay and delivered it at the works cheaper than I could have purchased and ground any grain locally.

51. No such drafts were made. The small works were only opened at the beginning of the cultivating season, so that the people might be near their homes.

52. The idea of the small works was to provide work for a few surrounding villages. A farmer could then send his family to earn their bread, while he stayed at home to plough, or if necessary, he could come to work one day and plough another.

53. Village tanks and roads through difficult passes to be made sufficiently good for bullock-cart traffic, also removal of prickly-pear.

54. They were conducted under my direct management in so far as that and kept all the accounts and verified all musters before payment. Under me I had members of the Táluka Local Boards acting as superintendents of one or two works each. In most cases they were unpaid, but in one or two cases where the gentlemen had themselves suffered from the effects of the famine small honoraria were given.

55. The superintendent had under him clerks according to requirement, and we were fortunate enough to get on almost every work a retired Public Works Department or Local Board overseer or clerk who was able to measure out tasks and allot them.

(*b*) The work consisting for the most part of digging earth from a surface and carrying it to a dam or road, the hollows left caused measurement to be easily done.

(*c*) Payments were made weekly by the superintendent in person. The Mámlatdárs and I myself continued to visit the works and supervise them fairly frequently. The superintendents entered into no formal agreement, but the works being of utility to themselves or their neighbours, and they themselves being respectable men, I never found any suspicion of foul play.

56. The task system was attempted roughly. Men were paid anna 1 pies 9, women anna 1 pies 6, and children anna 1. For late arrival and laziness I, the Mámlatdár or the superintendent fined men and women down to anna 1 each.

The works generally only were large enough to admit of some 500 or 600 people working at a time. Only people from neighbouring villages were taken on, and preference was given to cultivators and their families.

57. In some cases personal knowledge or local enquiry was useful in determining whether persons should be admitted. This was the exception, not the rule.

58. I think not. The small works were of course more popular, but were confined in their scope. Outsiders coming "for a loaf" were promptly sent away from small works.

59. For my own charge I should answer in the affirmative. One reason is that I was well supported by gentlemen willing to superintend the works, another is that plenty of such works was to be found which would be useful to the people. But if it were a question of large works or small works, both equally unprofitable, and both to be entirely managed by paid agency, I should prefer the large works for the sake of economy and facility of management. I think small works are very useful in the cultivating season.

60. There were Bhils in every village in my charge, and on the Ghâts were many Kokanis, Kolis and Várlis. No special tests were applied to them. The Bhils flocked on to works early for the most part, though some waited till they were very thin. The Ghát people got some crops, and, as I said above, largely maintained themselves by grass-cutting. In the rains some small works were opened near the Ghâts, and kitchens and cheap grain shops were started. Small amounts of tagái for subsistence were also given.

61. None in my charge.

62. A system of digging trial pits for wells was introduced on the condition that if water were found at a reasonable distance tagái was granted to the owner of the field, and the amount spent on the trial pit deducted from his grant. If water were not found Government bore the cost. The plan, however, came into operation too late in my charge to be of general utility, and I do not think it was a general success. I consider that if a man be given tagái and allowed to use it independently, he and his family do the work cheaper than hired labourers.

63-64. There are normally about 12,000 Momin weavers in Málegaon. No special relief was given them. Very few came on ordinary works. Many went to Bombay or returned up country. I was able to give them considerable assistance in buying their wares for charitable relief fund distributions of clothes and private persons also bought largely of them for distribution.

66. Tagái was largely given for fodder, the Ghát forests were opened and people encouraged to send cattle there, and pressed grass was imported and sold at cheap rates. The wells dug also provided a certain amount of fodder crops. About

70 or more per cent. of the cattle died. But the plough cattle were largely saved. The climate and want of water on the Ghâts induced disease which killed many cattle.

68. (*a*) By cooked food, except in a few cases where rain made the kitchens leak, when uncooked food was given: (*b*) Not at all.

69-70. At first village relief was mostly given: it was only later on that poor-houses were started in large places. Village relief was given (*a*) as a dole to village servants who were necessarily retained in the villages, but who had insufficient means of subsistence, and (*b*) to orphans and aged and infirm residents with no protector, and to other unprotected persons whose presence on works was undesirable, such as lepers. Village relief was preferred as being cheaper. It can be managed by existing establishments for the most part. Poor-houses were rendered necessary by the accumulations of beggars and ne'er-do-wells in towns near the rains. The recipients were selected by persons with local knowledge and no further test was required.

71, 72 and 73. Two. At Málegaon opened in May and at Nándgaon opened in June. The numbers reached 700 in one case and 600 in the other. They were mostly filled by beggars. The punishment was not to send from the work to the poor-house, but the reverse The beggars preferred anything to work. Weekly drafts took place.

74. The only kitchens (apart from large works) were at Kalvan and Kanáshi near the Ghâts. They were opened in the rains for the hill tribes, and served about 60 villages each (but very small hill villages).

75. The Famine Code ration, served twice a day, and only to those who ate at the kitchen.

76. Not in my charge.

77. The restrictions were the same as in giving village relief, for which the kitchens were a substitute. It was impossible to get about from village to village in the rains near the Ghâts, so the infirm, etc., were collected at kitchens.

2nd Question 74.—The Famine Code ration of wheat. In cases of sickness and weakness extra diet was allowed, generally consisting of milk or gruel.

2nd Question 75.—The village officers, strictly superintended by the Mámlatdár, Special Head Clerk and Circle Inspector, and less frequently by myself and other district officers. Every village was visited by some officer once a fortnight.

2nd Question 76.—In grain daily at the recipients' village. Later on central villages were selected.

78. Maráthas. No objections were raised.

79. Bráhman superintendents, supervised at frequent intervals by the Mámlatdár, Special Head Kárkun and Circle Inspectors.

80. Two only for Kokani cultivators near the Ghâts. Funds were provided by the I. C. R. Fund.

81. No. Their operation was too local.

82. None formally, but harsh measures for recovery were not put in force against any one unless it was shewn that his land was sold or heavily mortgaged to a sávkár who could well pay, or that he was a person of means.

87. The numbers were up to 30 per cent. in my charge. The reason was that so shortly before there had been distress, and the people had not recovered their position.

89. Depressed castes mostly; but I should say that by March there were quite as many Kunbis as Mahárs and Bhils: many of these were labourers only, but many were also occupancy tenants.

90. The famine of 1896-97 had taught the people that they would anyhow be kept alive on relief works, and had removed the superstitious ideas about poisoning the food, etc. But as I said above, I do not think there are many who would not rather live at home if they could than come on relief.

91. I know the sávkárs wanted exorbitant rates for money or grain, and that in many cases they absolutely refused to give them at any price. Silver ornaments were selling at annas 8 per tola. I am afraid the people mostly had very few resources last year.

98. The civil officer and other district officers frequently inspected the bazárs. There were one or two cases of Banyas trying to sell bad grain, but drastic measures were adopted and the abuse did not spread.

99. Very little. The káranda and umbar crop, which is large in my charge, almost entirely failed owing to the drought.

100. Very little. There were a few from the Nizám's territory, but not more than 200 or 300. There were also a few stragglers from the Dáng States.

102. Most of them produced friends or were adopted in their caste. A few were sent from Nándgaon to the Násik G. M. S. Mission. I had about 30 in my own compound. All but three have gone to friends or been adopted.

103. None, but I think that if the district committees are going to allot money to district officers for distribution, they should not be overcareful in restricting those officers to one or another head. Personally I got over this difficulty by spending the money first and asking leave afterwards when necessary—but I should have preferred a free hand at first.

105. Only in a few solitary instances, and this was due, I considered after enquiry, to the niggardliness of the would-be employers.

106 (*b*). I would only remark that after the 1896 famine everyone sowed grain which consequently became extremely cheap. Next year every one sowed cotton, which also became extremely

cheap. Consequently the Kunbis did not require so much as they might have had they been more judicious.

197. Partly. Generally a man will work for about ₹30 or ₹40 per annum (खाऊन पिऊन), *i.e.*, having food and drink thrown in. Day-labour was rather dearer last weeding and reaping season than usual.

110. I have already answered this question, *vide* question 54 above.

112. I think not to any marked extent; so far as I can make out the caste feeling, which is society, religion and morals to the people, was as strong on relief works as elsewhere. The people were generally granted holidays on feast days and local fair days.

A. H. A. SIMCOX,
Assistant Collector.

Sátára, 6th January 1901.

Extract from the letter from Mr. A. H. A. Simcox, I.C.S., forwarding the above.

I was during the late famine in charge of the tálukas of Málegaon, Nándgaon, Báglán and Kalvan in the Násik District. I have been transferred thence one month.

As I only received the papers of questions a few days ago, I had no opportunity to obtain any figures from my former charge. Thus it comes that all my figures are only approximate, and though I do not think they are far wrong, yet I do not wish them to be taken to be absolutely exact.

Captain G. F. Sealy, I.M.S.

Answers by Captain G. F. Sealy, I.M.S. late District Medical Officer, Kaira, to the questions drawn up by the Famine Commission.

94. I believe the *Talati* registers all births and deaths in villages reported to him, in the case of municipal towns the Secretary attends to the Registers. Reporting of births and deaths is compulsory on the part of relatives, and omissions in this respect are, I believe, punishable offences.

95. The high mortality in Kaira is partly attributable to both unsuitable and insufficient food. As regards the former the Guzeratis with the exception perhaps of the *Dhads*—low caste people who are almost the only regular labourers—seem to be unable to thrive well on grains they are unaccustomed to. In various villages all over the district I found that even the *Kunbis* and *Patidars* who had not suffered from any scarcity of food, had died in abnormal numbers owing, according to the statements of their relatives and others, to their being reduced to live on *Jawari* and Rangoon rice in place of *bajari* and home-grown rice. In poorhouses also I found the same thing and it was sometimes stated by the relatives of people who had returned ill from relief works and died in a few days, that the grain sold on the works did not agree with them. Again, dole-recipients used sometimes to eat grain raw and this was what I repeatedly saw in and around villages though wood was always to be had for the cutting.

As regards the sufficiency of food, I think that the wages earned by men on the relief works, were insufficient for the Guzerati who, in Kaira at least, is accustomed to a generous dietary while doing light or very light work, except in the case of the *Dhad* and *Kunbi*.

At the commencement of the hot weather, in March and April, the quality and quantity of the food of relief workers seem to have been instrumental in producing a fever (not relapsing or famine fever, it was proved) which often terminated in death within a few days of the sufferers' return to their villages. The same sort of fever seems to have affected old and young people in the villages also.

I also believe, as I have mentioned in the statement appended, that from the middle of November 1899 to February and March 1900 there were not enough people on the village dole. Besides this there were at this time, although to a lesser extent than from April to June, young able-bodied people of both sexes who seemed to be in distress and getting insufficient food but who could not be persuaded to go on to the relief works. The latter used to give as their reasons that they were "not

paid" (which meant that for 3 or 4 or 5 days after commencing work, they were still unpaid), that the wages were insufficient, the work too hard, that they would not leave their villages, etc. In February when daily payments to new comers was commenced, I was able on one or two occasions to collect and despatch to a relief work as many as 150 men on promising that they would be paid daily for the first week and bi-weekly after that, as I believed was being done.

96. There was practically never any difficulty as regards the quantity of water in villages or works. When cholera broke out the systematic disinfection of wells was carried out. I advised the Collector to have the wells of all villages where cholera appeared disinfected at least once a week, and this was done more or less according to the energy and intelligence of the village officials, the number of wells in each village varying from 5 to 20 or 30; no more responsible officers could be obtained for the work.

I should mention that I had no previous experience of, or information about, the efficacy of permanganate of potash as a disinfectant of drinking water. As soon as I realised the extreme value of the permanganate—and this was in a few days from the commencement of the outbreak—I made arrangements for the immediate disinfection weekly, bi-weekly and in some cases every other day, of the wells near the relief works and poor-houses in the whole district. This was largely successful. At some works, however, cases of cholera continued and I found that this was due to the majority of the workers living in the surrounding villages. I then made arrangements with the Collector for the disinfection bi-weekly of the wells of all villages within a radius of 3 or 4 miles from the works. This measure was very successful at most of the works where the disease seemed to be lingering.

Some wells containing a large amount of organic matter required much more frequent disinfection than others.

97. Trench latrines were in use at both relief works and poor-houses, as well as kitchens. In the former only a small proportion of the workers could be got to use them and it was next to impossible, to prevent them squatting in *nallas*, behind hedges, etc. In poor-houses they were too often improperly used, the trenches being avoided. The management of the latrines and other sanitary arrangements was supervised by the Special Civil officer who took advice from the Hospital Assistant on the work and myself.

At relief works I thought the trenches in latrines were never properly dug, though the Famine Code contains explicit directions on the subject. They were generally excessively wide and too shallow, so that people might easily misunderstand their purpose. However, though defects in these matters gave rise to a certain amount of nuisance, the Sanitary Commissioner thought there could follow

little injury to health in the loose sandy soil that exists in most parts of Kaira.

98. Yes;—the Civil Officer, Hospital Assistant and myself used to inspect the grain sold on the works: I always found it to be of good quality and never heard any reports on the works to the contrary.

99. To a small extent the people in the Eastern part of the Thasra Taluka—one of the most distressed tracts in the districts—lived more or less from about February to April or so, on the *Mowra* fruit. Such people died in rather large numbers as it was only those in great want that took to this fruit which, though harmless, is of small nutritive value.

100. I only noticed any immigration from Native States at the Pali Metal-breaking work where a good many people from Marwar and, apparently, the Panch Mahals sought work. On this work I should say that about 20 or 30 per cent. had come from places outside Kaira.

101. Judging by the condition of these "foreigners" at Pali I should have thought that their mortality was not more than, if as high as, that of British subjects. From enquiries about the death registers in villages I think that the number of deaths of immigrants into Kaira, compared with the total mortality, was next to *nil*.

Nasirabad,
28th January 1901.

I took up my appointment of District Medical Officer for famine, Kaira, on the 11th November 1899 and remained in the district till about the 20th July 1900.

I should like to mention to the Famine Commission some of the defects which in my opinion existed in the famine administration in Kaira and to make some suggestions, where I can think of any for their removal.

First as regards relief works. Early in the famine these do not seem to have been made sufficiently attractive, as they required to be, to induce famine-stricken people to take relief. The works were not numerous enough so that people had to go considerable distances, 8 to 15 miles or so, and were practically compelled to live at or near them, and had to make a rather long journey when they visited their homes weekly, which seems to have been their custom. The piece-work system of payments which was in force from October to February seems to me unsuitable to all except the *Dhads* and other professional labourers in Kaira. The majority of the people on the works, *viz.*, *Dharalas* or *Kolis*, seem to be unaccustomed to any but the lightest labour, and could seldom earn more than $1\frac{1}{2}$ annas as far as I could observe, while the *Dhads* commonly earned 3 annas and more, as I was told by the Assistant to the Executive Engineer of Kaira. The minimum wage, also, of $1\frac{1}{4}$ to $1\frac{1}{2}$ annas, seemed to be too low considering that the men, doing less work probably,

were accustomed to nearly double the amount of grain that the wage purchased. This is probably one of the reasons explaining the very large amount of illness, leading to a high village mortality, that originated in the relief works. In a great many cases also, a man and woman earning this wage would have to feed one or more children who, for some reason, would not be taken to the kitchen to be fed. I would suggest a minimum wage of $1\frac{3}{4}$ or 2 annas with grain at 16 or 14 lb per rupee, and a penal (subsistence) wage for the absolutely lazy, of 1 or $1\frac{1}{4}$ anna, according to the price of grain. At one or two relief works in May and June I noticed that the people were getting the minimum wage of $1\frac{1}{4}$ or $1\frac{1}{2}$ anna though they were doing little more than an hour or two's work a day. This seemed to me very sound as only the really needy took advantage of the relief. So distasteful are the relief works to the majority of the population, that they only received enough to keep them alive and in health till the arrival of better times.

Tank works were appreciated much more than works extending over long distances, such as road or drainage works. On the latter, parents sometimes had to take their children considerable distances in order to get them fed at the kitchens, and the consequence often was that the children were fed by their parents and not at the kitchens.

Metal-breaking was very unpopular except to the professional metal-breaker, who seemed to earn good wages at the quarries. This seemed to me the most laborious and trying task of all to the untrained man, who sometimes earned as little as $\frac{1}{2}$ to 1 anna a day at the occupation. The minimum wage for a really small task seems to be called for in quarries. A penal (subsistence) wage might be substituted in the case of the absolutely lazy.

Frequent payments would tend as much as anything to bring men on to the works. It is obvious that on first arrival at a work a man, who is probably more or less weak, cannot manage to work without food for a week or even 3 days. Daily payments would, if introduced, have to be continued, as otherwise men would move every week from work to work to receive daily payments. This occurred to a considerable extent in Kaira.

Huts for workers seemed to be little used. Unless made on a somewhat luxurious scale, they are hotter in the day than the shade of a tree. In cold weather at night they are little used, as people prefer to lie around camp fires. The camps built for the monsoons appeared to me to be anything but waterproof; in fact, except for the kitchen and a few other huts for the civil officers, hospital, etc., I think that in Kaira, where there is so much shade, the building of camps is superfluous expense.

The kitchens on relief works were on the whole well managed. Perhaps the practice of giving

milk to young and emaciated children might have been introduced earlier, but there was often great difficulty in getting a sufficient supply of milk.

The Hospitals on relief works were not patronised much, as sick people generally went back quietly to their villages, preferring any fate in their homes to treatment on the relief works, far from their villages. I would suggest that, in cases of slight illness, workers should be treated as "out-patients" if they desire it, getting a subsistence wage or the minimum wage, and living where they like. Patients seriously ill in Hospital might be given the minimum wage for their families. The Public Works subordinates used often to send people to Hospital on account of trifling ailments. They were unwilling to remain in Hospital though they would have been pleased to be treated as out-patients while getting a wage.

Secondly, as regards poor-houses:—

These were well managed generally. The grain used was the cheapest obtainable. This often did not agree with the inmates when they were accustomed to a different sort, especially in the case of old people. Here also milk was not given to delicate children and infants as early as it might have been, but this was sometimes unavoidable, as milk could not always be obtained locally in sufficient quantities.

Thirdly, as regards villages, no difficulty in regard to water-supply existed.

For a considerable period, *viz.*, from the middle of November up to March, there were too few people on gratuitous relief. There had been previously a large but probably not excessive number on the village dole, but Government asked the Collector for an explanation of the apparently large numbers on the Kaira dole lists. Government did not seem satisfied with the explanation of the Collector who was asked to have his dole lists scrutinized so that the flow of private charity should not be stopped. This is, as far as I can remember, the substance of a Government Resolution of October or November 1899. At the end of December 1892 and the beginning of January 1900 I noticed, as I thought, that there were very few on the dole even of those whom I thought should have been, and in my first fortnightly report about that period, I stated that I had observed a "degree of want amounting in some cases to actual starvation." These were my words as far as I can remember. The Collector in his remarks on my report implied, if I remember rightly, that I was exaggerating the amount of distress, and the Commissioner, in forwarding the correspondence, quoted the apparently large numbers on the dole in his Division. In the two or three following fortnightly reports I continued to draw attention to the severity of the distress in the Nariad, Kapadvanj and Thasra Talukas. In fact, in the Mehmadabad and the three abovementioned Talukas the lists

had been cut down to almost *nil* when they existed at all. It seems to me that this reduction in the lists, which affected a large number of aged and young dependants and other helpless people eligible for the dole, caused a great deal of suffering. It should be noted that, owing perhaps to the previous freedom of the district from famine, the proportion of aged and helpless people in Kaira was unusually large and that the Collector had pointed this out to Government as an explanation of the apparently large number of dole recipients in the district in October 1899.

From March or April to July when I left the district, the village dole lists were as high as any one could expect. In fact there were many getting the dole who should have been on relief works, but who I found from repeated visits to their villages, were prepared to starve rather than go on to the relief works.

From this and from other remarks I have made, unless my observations be altogether exceptional, it will be seen that the majority of the poorer classes in Kaira are most difficult to relieve from famine conditions without showing unusual liberality. It seems, with people of the character of the *Dharalas*, to be next to impossible to draw the line between undue harshness and lavish generosity. What also rendered the task of the district and famine officers more difficult was the entire lack of experience of all concerned as to the effects of a famine in Guzerat and the suitability or the reverse of the 1899 Bombay Famine Code to the people of this province. The famine it has passed through seems to have clearly demonstrated the inferiority in stamina and working powers of a large proportion of the Guzeratis and the relatively large supply of food they require to keep them in health.

The knowledge gained during the last famine will be an invaluable guide in the future, and the only pity is that it was so dearly bought.

1205

Mr. W. H. Lucas, I. C. S.

Replies by Mr. W. H. Lucas, I. C. S., Deputy Commissioner, Thar and Párkar, to the Famine Commission's questions.

Introductory.

1. The monsoon of 1898 had been almost a total failure throughout the desert, the rainfall having averaged 5 inches as against a normal of 14·25 for the 12 months and 3·92 against 10·58 for the rainy season, *i.e.* June to September. The harvest of 1897 had been a good one. There was absolutely no crop raised in 1898, except an infinitesimally small rabi area on wells.

2. There were only 11,146 acres of kharif sowings as compared with an average of 400,000 acres.

3. (*a*) The average rainfall of the affected part during the last 9 years has been 10·58. (*b*) The actual average rainfall in 1899 was ·18 only in the affected part and the percentage on the average was ·7. (*c*) There was no rainfall after June in 1899. (*d*) The rainfall in each of the 4 months, June to September 1899, as compared with the average of those months for the past 9 years, is as follows :—

	1899.	Average of 9 years.
June	·18	2·15
July	0	4·78
August	0	1·93
September	0	1·83

4. There was no harvest in 1899 as the total cultivation failed.

5. The percentage of the total population of the affected area depending exclusively on agriculture (*a*) as petty cultivators is 22. (*b*) The percentage of agricultural labourers will be given hereafter.

Preliminary Action.

6. It was assumed from the total absence of crops for two consecutive years, from the death of over 90 per cent. of the milch and plough cattle and from the emigration of two-thirds of the total desert population.

7. The observed facts were that practically all the cattle had died ; that nearly all the people except the Rájputs and those who were tied to their homes for family reasons, had emigrated ; that the price of grain (bájri) had risen to about 8 seers to the rupee, the normal price being 20 seers ; that reports were received that cases of emaciation had been noticed among the remaining population.

8. A few small village works (tanks) were opened at the end of September 1899 and at the same

time a few special tanks were also opened for high caste Rajputs who would not work with persons of other castes and whose women would not work in the day time as they were purdahnishin. The number on relief works on 31st October was 396.

Charitable relief by means of cash doles at Code rates were also given at táluka head-quarters to destitute, aged and infirm and professional beggars whom the community would no longer support. Also to destitute wayfarers from Márwár and adjoining Native States.

No special tests were applied.

9. There was a balance of Rs. 5,335 left over from the Thar and Párkar Charitable Fund of 1891-92, and this balance was drawn upon as early as July 1899, directly it was found that people were beginning to wander aimlessly, and that emaciated Márwáris and others were passing through the desert.

(*a*) Lists of relief works were ready, the works had been actually located and estimates of cost been made beforehand.

(*b*) No. No special establishment was ever employed for relief works in the desert.

10. Small village works.

11. 1st (*d*) Organization of private charity.

2nd (*e*) The Government forests in the Nara Valley were thrown open in October free for grazing for desert cattle.

3rd (*b*) Poor-houses.

12. (*a*) From November onwards Circle Inspectors were appointed, who toured continuously in their circles until the end of the famine and relieved with cash doles from the Thar and Párkar Charitable Fund destitute, aged and infirm persons in outlying hamlets where grain could not be procured. Lists of persons relieved and accounts of money spent were kept by the Circle Inspectors, and these were tested and verified by the Mukhtyárkars, the Deputy Collector and the Deputy Commissioner. The Mukhtyárkar saw all, and the Deputy Collector the majority of the persons who were on the village cash dole lists; and these officers constantly added to or struck off from the lists as they saw fit.

The Circle Inspector visited every village and hamlet in his circle at least once a week and gave a 7-days' dole in cash to everybody on his list. There were no grain dealers at more than 17 villages in the desert other than táluka head-quarter towns, but at these of course Famine Code grain doles were given from the Thar and Párkar Charitable Fund until 1st January 1900, and thereafter from the Government gratuitous grant. (*b*) There was no local employment of labour, except for the Memghwárs, Bhils and Kolis in the early part of the famine who collected and sold to 'Banias' and Memons the skins of dead cattle. (*c*) With the exception of the town of Mithi, the panchayet of which place subscribed Rs. 500 and fed destitute wayfarers, aged, infirm and others until the poor-

house was opened, there was no local charity whatever given in the desert itself. A fund called the Thar and Párkar Charitable Fund, of which the Deputy Commissioner was administrator, was opened in September 1899, and altogether Rs. 16,832 were subscribed to it from the Province of Sind. This fund had a balance of Rs. 5,335 remaining over from the "miniature famine" of 1891-92. (*d*) The Circle Inspectors were, in the first instance, responsible for observing the general condition of the people and made weekly reports to the Mukhtyárkars, besides reporting immediately any serious instance or state of things that came under their notice. The Mukhtyárkars and Deputy Collector, who toured continuously, and the Deputy Commissioner, who made four comprehensive tours round the desert, all devoted much time to observing the general condition of the people.

13. Loans were not issued quite at the outset, but during the famine a very large amount of relief was afforded by means of takávi grants. Altogether Rs. 1,60,956, all under Act XII of 1884, were distributed between December 1899 and September 1900 as under—

		Rs.
December 1899	... ...	4,660
January 1900	... ...	13,697
February	„	15,669
March	„	29,395
April	„	...
May	„	3,826
June	„	10,704
July	„	14,082
August	„	52,407
September	„	16,516
	Rs.	1,60,956

Of this, Rs. 99,467 was given for subsistence, Rs. 51,894 for seed, and Rs. 9,595 for plough cattle. Practically all the grants were of sums under Rs. 50, and the whole amount was advanced free of interest. The advances were almost solely made to petty cultivators, and all grants are recoverable in whole.

I give a transcript from a report made by me to the Bombay Government (through the Commissioner in Sind) which explains the way in which the subsistence grants were generally utilized. The Bombay Government in their Resolution No. 2061, dated 19th April 1900, has approved of the use of the takávi.

"(1) No application from a man holding less than three fields ('thalis') to be considered. (2) The value of the applicant's land to be taken as one rupee an acre and the maximum amount of the advance to be one-third of the value of the land. (3) Except for special reasons advances not to be made to Khátedárs who had left the desert with

their families, but have returned in the hope of getting takávi. Such persons to go on works. (4) The advances, if under Rs. 25, are repayable on 1st March 1901, and if over Rs. 25, by two equal instalments, the first due on 1st March 1901, and the second on 1st March 1902.

"By means of these advances many people who would have no choice but to go to the relief works, have been saved the disgrace which they consider this would have brought on them. And it is not as though these advances, even if nominally made for subsistence, were recklessly spent, had encouraged the people to idleness, and to look to Government for support instead of shifting for themselves. On the contrary, from inquiries I have made I found that in the majority of cases the advances have been applied to what is called 'katar,' which is really equivalent to trading in grain."

The system of "katar" is as follows:—A man with one or more camels goes to Umarkot, Nabisar or Jhudo and with his takávi advance purchases grain at a cheap rate. He then returns to his home, sets aside a part of the grain for the consumption of his family, and sells the remainder to Banias or others at the high rate prevailing in the desert. After resting himself and his camel he sets out again, and the limit to the number of his journeys would practically be the limit to the endurance of his camels. If it be argued that a man with camels should not be given an advance by Government for subsistence, it can be answered that the camels, if sold this year and in their present condition, would only fetch a fraction of their real value. During my recent tour I enquired particularly into the takávi question, and everywhere I met men with camels carrying on a small grain trade on their own account between Sind and the desert.

14. No. Average depth of water in the desert is about 250 feet.

15. There were no District or Local Boards works.

16. There were no test works.

Large Public Works.

19 to 51. There were no large public works in the desert.

Small Village Works.

52. They formed the entire scheme of relief other than gratuitous relief and takávi.

53. Tank excavation only.

54. They were conducted (*b*) under the supervision of the Civil Agency, (1) by direct management.

56. No attempt was made to work the Code task system. The system was one of family piece-work. Excavation was paid for at rates varying from 8 to 12 annas per 100 cubic feet and averaged Re. 0-9-5

throughout the famine. The following is a transcript from a set of rules for payment of wages and allotment of tasks drawn up by me for village tanks, which was duly approved by the Bombay Government in Government Resolution No. 2061, dated 19th April 1900.

"1. Tasks to be allotted to each separate family. Two families may, however, combine if they expressly ask to be allowed to do so.

"2. The first step is to place each member of the family in his proper class, *viz.*:—

1. Diggers.
2. Carriers.
3. Children under 8 and 12.

"It will then be calculated what is the total maximum wage that can be earned by the family. The rate per hundred cubic feet fixed for the tank (9, 10, 11 or 12 annas) will then be consulted, and it will be calculated what number of cubic feet must be excavated in order to earn the maximum wage. This will be the daily task to be assigned to the family. Tasks will only be allotted in multiples of 10 cubic feet, *i.e.* 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, and so on. If the task to be allotted works out to under 5 over a certain multiple of 10, it will be reckoned as that multiple; if it works out to 5 or over, it will be reckoned as the next higher multiple.

"Examples—The task works out to 84 cubic feet; a task of 80 cubic feet shall be allotted.

(*b*) The task works out to 125 cubic feet; a task of 130 cubic feet shall be allotted.

(*c*) The task works out to 77; a task of 80 cubic feet shall be allotted.

"3. All adult males, unless they are weakly, should ordinarily be classed as diggers in class 1. If all adult males are so classed, the family task will be larger than if some adult males are classed as carriers in class 2, as the Deputy Commissioner finds is now done in Chánchra and Nagar tálukas, so that nothing is lost by classing adult males in class 1. Youths with sprouting beards and old men should be classed as carriers in class 2 and get the wage of their class, but it is of course a matter of arrangement among the family, who shall actually dig and who shall actually carry, and no interference need be made in this respect.

"4—5. * * * * *

"6. Payment will as at present be made on completion of the task, but if a task is uncompleted at the close of the day, a proportionate share of the day wage may be given."

Every one who wanted it was given employment.

57. No.

Special Relief.

60. There are no aboriginal tribes.

61. No.

62. No.

63. No.

66. The Nara Valley forests were all thrown open free to cattle coming from the desert, and wide publicity was given to this fact. Owing, however, to the total failure of the rains in the Nara Valley also in 1898 and 1899, the only grass available was rank inundation grass, which was so poisonous to the cattle of the Nara Valley itself that 30 per cent. of them died. A few desert cattle reached the Nara Valley jungles in an emaciated condition; but being unaccustomed to the damp climate and rank weedy grass, they derived very little benefit from the concession, and nearly all of them died.

67. No.

Gratuitous Relief.

68. (*b*) In cash. A general rule was made that the number of dependants relieved was not to exceed 10 per cent. of the total number on the work. The following instructions were issued on this point:—

"4. Very old and infirm men and very old women are to be classed as dependants, and on no account is any work to be exacted from them, and they are to get the allowance of their class No. IV, minimum. Children under 8 are to get the allowance of their class V.

"5. Both dependants and non-working children get their allowance from gratuitous relief funds and not from the funds sanctioned for the tank. Full allowance should always be given up to 10 per cent. if the number of dependants and non-working children is so much as 10 per cent.

"Old dependants should be counted first in the 10 per cent. calculation. In practice there should be very few such (from whom no task is exacted) and never anything like 10 per cent. If the Mukhtyárkar finds that there are more than 10 per cent. of dependants and non-working children, he may use his discretion and grant allowance up to 15 per cent., but never beyond. The officer in charge of the work (Tapadar or otherwise) should report for orders when he finds there are over 10 per cent.

"The greatest care should be taken that the people do not gain the idea that all dependants and non-working children will receive allowances, otherwise frauds will be practised and the numbers swell unduly. When the number of dependants and non-working children is over 10 per cent., in deciding who shall be given allowances and who shall not, preference shall always be given to those who come from a distance. The inhabitants of the villages at which or very near which the tank is being excavated should not get any share of the allowance given over 10 per cent., that is to say, the 10 per cent. of most deserving cases should be decided first, and of that 10 per cent. such villagers will of course get their share; but when it comes to be determined who are to get the extra allowance over 10 per cent., those villagers will be left out of consideration. Special cases must of course be specially determined by the Mukhtyárkar."

It will be observed that the Deputy Collector and Mukhtyárkar were allowed to use their discretion and pay up to 15 per cent. if really necessary.

69. At táluka head-quarters cooked food was given in poor-houses, at large villages grain was given according to Code doles, and in outlying hamlets cash doles were given from the Thar and Párkar Charitable Fund.

70. No.

71. Six, all in November, *viz.* 4 at the Desert táluka head-quarter towns, *viz.* Cháchro, Nagar, Mithi and Diplo, and the other two at the towns of Umarkot and Khipro, which are on the edge of the desert and through which most of the famine-stricken immigrants from Native States and the Thar and Párkar desert passed. The persons who frequented them (except Umarkot and Khipro) were, chiefly, destitute, aged and infirm, and deserted children, and professional beggars belonging to the táluka head-quarter towns and the vicinity thereof, and famine-stricken immigrants who had broken down on their journey across the desert to Sind.

The Umarkot and Khipro poor-houses were nearly entirely filled with famine immigrants from foreign States who had broken down utterly by the time they reached Umarkot and Khipro, many of them having struggled more than 100 miles over the desert sand hills. The largest number ever relieved at the 6 poor-houses was 1,755, and the average number throughout the famine was 1,080.

72. No. Immigrants as soon as they had regained their strength were sent off to works.

73. Yes, the strictest measures.

74. None.

(2nd) 74. The poor-house ration consisted of grain, dal, ghi, and vegetables as provided in the Famine Code. The grain consisted of bájri and rice. One meal consisted of bájri bread and vegetables or dál and the other of rice and dál. Cases of sickness and weakness were provided for as advised by the Medical Officer in charge of the poor-house, and milk was also supplied from the Thar and Párkar Charitable Fund to sick and weakly and young children in addition to the Code ration.

(2nd) 75. The Circle Inspectors. By the Mukhtyárkar, the Deputy Collector and the Deputy Commissioner. This question has already been answered. (*Vide* answer to 12.) The Circle Inspectors saw the recipients at least once a week and the Mukhtyárkar about once a month.

76. (*a*) Partly in cash, partly in grain. The average number paid in cash was 656, in grain 312.

(*b*) if in grain daily, if in cash weekly.

(*c*) if in cash at their homes, if in grain at the Tapadar's 'dero,' school or police station.

77. To purdahnishin women in cash. The maximum number of such women was 42, while the average number was 30.

78. Bráhmins. No reluctance was ever shown.

79. There were no kitchens.

80. No.

Suspensions and Remissions of Land Revenue.

82. There were only Rs. 4,448 of land revenue for collection for 1899-1900. Of this, Rs. 1,248 was collected and the rest suspended, and it will be totally remitted. The whole of the outstanding demand for 1898-99, *viz.* Rs. 85,712, was again suspended, and an application will now be made for its entire remission.

83. In 1898 a large area of land was sown, but no crop was raised in any part of the desert except a very small area on wells. Suspensions were not based only on crop failure, but also on the total inability of the individual to pay, for he had had no crop for two consecutive years and had lost all his cattle. These suspensions were based on the personal observations of the Deputy Commissioner and the Deputy Collector.

84. Before collection of revenue began.

86. Total relief was given by suspension, inasmuch as the collection of the total amount due was suspended.

General.

87. It never exceeded 4 per cent.

88. It never was excessive or defective.

89. Petty landholders, cattle graziers and breeders, and the lower classes, *viz.* the Bhils, Kolis and Menghars.

90. The only previous serious famine on record was that of 1868-69, in which no relief works whatever were opened, but wholesale relief by means of cooked food at numerous centres was adopted. 1891-92 is known as the year of "miniature famine" in the desert, but only about Rs. 5,000 had to be spent on relief works, and comparison between such a trifling visitation as that scarcity and such a gigantic calamity as the recent famine is impossible.

91. In my opinion all the people who accepted State relief had exhausted their own resources.

92—93. No test works were carried out in the desert.

94. The village officers, as usual, performed this duty.

95. There was no really high mortality in the desert except among the well-to-do Hindu traders and Bráhmins, who succumbed to dysentery and diarrhœa induced by unsuitable food; that is to say, bájri bread and chillies took the place of their usual diet of milk, butter, curds, and ghi.

96. The water-supply in the desert is at the best of times scanty. In good years the tanks do not hold water after the end of December, and during the famine all tanks had been dry for 2 years. The only water available throughout the famine was from wells which are situated at long distances apart and average 250 feet in depth.

The water of these wells became unspeakably brackish and salt; and this no doubt was a cause of increased mortality. Nothing can ever be done to improve the well water-supply in the desert.

Where statistics showed a very high mortality the Deputy Sanitary Commissioner always asked for and was furnished with the reasons, and the following extracts of a report made by me to that officer will show that when there was a high mortality it was solely attributable to diseases connected with unsuitable food and to unsuitable climatic conditions.

"(2) The results of my inquiry are summarized in the accompanying Statements I—IV. My estimate is that during the months under reference less than half the normal population was left in the four desert tálukas. All who had any cattle left or who had no means of maintaining themselves quitted the desert, and these would fall under the following classes:—

(*a*) Hindus others;

(*b*) Mahomedans; and

(*c*) low caste (these, however, did not leave so freely as the above two classes, because during these months a considerable trade was being carried on in the sale of hides, and this is the class which was mostly occupied in that trade).

" (3) The total number of deaths in Cháchro Táluka in the month of December was 209, of which there were no less than 158 or 76 per cent. deaths amongst Hindus, the percentage of which is only 31 of the total population.

" Again, of these 209, there were as many as 68 or 33 per cent. deaths in the town of Cháchro alone (population only 1,700) and the remainder, *viz.* 141 in the whole táluka. A similar examination of the figures for the other three months elicits the same facts, and I need not proceed to a minute examination of the figures for each month.

" In the Mithi Táluka I find that out of the total number of deaths in December, *viz.* 121, there were no less than 72 or 60 per cent. amongst Hindus, the population of Hindus being only 22 per cent., Mithi town counting no less than 55 or 44 per cent. The population of Mithi town is 3,000.

" (4) The cause of an increase in the number of deaths at a time when famine is prevalent would naturally be sought for in starvation, and had not the facts as contained in the accompanying statements shown otherwise, I should myself have suspected that starvation was either directly or indirectly responsible for the high mortality. But if the

deaths had really been due to starvation, then certainly there should not have been so high a mortality amongst the Kirars and Bráhmins, who are the well-to-do class. In my opinion the high mortality was due to the following main causes :—

(i) Change of climatic conditions. There having been no rain for more than two years, the climate of the desert was quite changed, and, above all things, the water had everywhere become inconceivably brackish and unwholesome.

(ii) Compulsory change of diet, curd, milk and butter, which the inhabitants of the desert are in the habit of using daily, and which is a cooling diet, had to be replaced by bájri bread and chillies, which is a heating diet.

"These two causes combined produced fever, dysentery and pneumonia, and these are the three causes of deaths which I find have invariably been entered in the Registers.

"From statement IV, 'distribution of deaths according to age,' it will be seen that the mortality has been highest amongst young children under 10 and old persons over 50 years."

97. (*a*) The works were all small tanks situated in hollows between the sand hills, and about 500 was the outside number ever engaged on any work. The vast deep sandy waste and the bright sun afforded the best sanitation imaginable.

(*b*) An adequate staff of sweepers was employed, and the superintendent of each poor-house supervised their work.

98. Yes. The Mukhtyárkar himself opened every new work and provided a grain dealer of approved character. No inferior or unwholesome grain was seen.

99. The flowers and fruit of the 'kirar' bush, wild caper (*Capparis aphylla*) in February, March and April, the pods of the kandi tree (a kind of 'Mimosa') in March, April and May, and the fruit of the 'jar' tree (*Salvadora olsoides*) in May and June, were universally used by rich as well as poor to supplement their food, and the last mentioned wild produce was, as usual, almost the only food eaten by the lowest classes during its season, so much so that the numbers on relief works temporarily declined in the month of May.

The consumption of bread made half of the bark of the kandi and blackwood trees, and half of bajri flour caused much dysentery and diarrhœa, and was certainly detrimental to health. The consumption of the fruit of the kirar bush (dhoura) and the fruit of the 'jar' tree, though it often induced diarrhœa, had no really harmful effect on the health of the people, who, rich as well as poor, even in years of plenty, are accustomed largely to supplement their food with these wild products, especially the last named, in the seasons during which they are plentiful.

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100. Roughly speaking, about 150,000 famine immigrants passed through the desert on their way to Sind from Jodhpur, Jesalmir, Rádhanpur, Pálanpur and Cutch, fully ¾ths of them came from Jodhpur and Jesalmir. The proportion relieved of these immigrants was (will be reported hereafter) per cent. of the total number relieved on works and 35 per cent. of the total number relieved gratuitously.

102. On 1st October, from which date the famine was officially declared to be at an end, the total number of orphans left in the hands of the State in this district was 47, of which 26 were made over to relatives and friends, and 19 are being handed over to the Native States to which they belong, and the remaining 2 will be handed over to an orphanage opened at Sukkur (Sind). No unclaimed orphans whatever belonging to the Thar and Párkar District were left.

103. No.

104. No.

104. (*a*) A thorough system was in force by which all desert grain dealers reported to the village officers the exact amount of grain imported by them from time to time, and the village officers submitted weekly returns of these imports to the Mukhtyárkars. The statistics were very fairly reliable, because the number of villages in which grain dealers reside or do business is very small. After November 1899 practically the whole of the grain consumed by the people was imported.

105. No.

106. No.

107. There is no practice of paying wages in grain.

108. The system of wages and task adopted on village works was the only departure from the provisions of the Famine Code. The system has already been described (answer to question 56) and was approved by the Bombay Government.

The system adopted was fully justified, the workers on relief works were unaccustomed to excavation work, and any system other than one of payment strictly according to results would have demoralised the workers, and attracted numbers who were not in real need of relief.

109. No.

110. None.

111. This question is inapplicable to my district.

112. There were no large works in my district.

W. H. LUCAS,
Deputy Commissioner, Thar and Párkar.

Mr. P. E. Percival, I. C. S.

Answers by Mr. P. E. Percival, I. C. S., to the questions drawn up by the Famine Commission.

Introductory.

Answers to these questions are also being submitted by the Collector of Sholápur, and he informs me that he is sending the figures which are required, and that therefore these figures need not be included in my report. Further, my experience of famine is of the Ahmednagar, not of the Sholápur District, as I came to the Sholápur District only on 8th September 1900 and at a time when the famine of 1899-1900 was practically over. I was in the Ahmednagar District in charge of the sub-division of the First Assistant Collector, that is, the Ahmednagar, Ráhuri, Sangamner and Akola tálukas from 1st November 1899 to 1st September 1900. I may also mention that I was also in the Ahmednagar District in the famine of 1897 and had charge of the Ráhuri and Kopargaon tálukas from 18th December 1896 to 27th October 1897. I am able therefore only to give my opinion in regard to certain of the questions, particularly with reference to the Ahmednagar District, and cannot give exact figures. If such figures have not been obtained from the Collector of Ahmednagar, I could obtain the figures, but would not in any case have time to do so now as I have only been given four days' time to answer these questions.

(1) The outlook was not favourable. The Ahmednagar District was severely affected by the famine of 1897; in 1898 the crops had been poor; only in 1899 was the harvest good.

(2) Will be given in the report of the Collector of Ahmednagar.

(3)

(4) I cannot give the figures. There was a fair kharif harvest in the east of Akola Táluka, not much elsewhere in my sub-division.

(5) I cannot give the figures.

(6) Test works were begun before regular relief works were instituted.

(7) I was not in the district till 1st November 1899; but I understand that works were begun when it was found that the crops had failed and people were wandering about in search of work.

(8) Road works by Local Boards were begun first of all, and then test works, mostly metal-breaking, carried out by Government.

(9) (*a*) A list of works was ready.

The three large works, the Máldevi Tank, Kapurwádi Tank, and the Ojhar Right Bank Canal,

had been fully surveyed and estimates of costs prepared. As regards the remaining works, which were almost all metal-breaking and road repair, I do not know what programme had been made, nor do I know the details regarding the scale of establishment.

(10) The programme contemplated large relief works as the backbone of the relief system. There was no programme of village relief works ready in reserve.

(11) (*a*) Test works were first opened, and were then turned into regular relief works.

(*b*) Two poor-houses were started in the district shortly after regular relief works had been begun.

(*c*) Kitchens were started in nearly all cases the moment the works began. In one or two cases only they were delayed for a week or so. Kitchens elsewhere than on works were started late in the famine for the purpose of concentrating the dole people in central villages; two kitchens only were started in my sub-division.

(*d*) Private relief was organised some time after relief works were started. Relief from the charitable fund was not given out to any large extent till the commencement of the rains.

(*e*) Government forests were opened at an early date in the famine.

(12) Relief Head Kárkúns and Circle Inspectors were appointed to carry out the system of local inspection and control.

(*a*) The above officers were directly responsible for the village relief.

(*b*) There was very slight demand for labour; so far as necessary it was stimulated by the above officers.

(*c*) The Mámlatdárs and Sub-divisional Officers tried to organize local charity and collect money from the traders of the big villages.

(*d*) All the Civil Officers toured in their charges to observe the condition of the people and take measures for their relief.

(13) Loans were issued at the outset. A large amount was issued under the Land Improvement Act to the agricultural classes, almost entirely for wells, and particularly for deepening already existing wells. They were issued as ordinary tagávi loans, and were recoverable with interest according to the usual tagái rules.

(14) Irrigation wells can be made in all parts of the sub-division, except in the hills, particularly in the Akola Táluka. I cannot say for certain what the depth of the water was, but the water had sunk to some extent even before the end of the rains of 1899, owing to the somewhat deficient rainfall in the previous two or three years. The digging of wells, particularly the deepening of existing wells

was encouraged by loans, which were useful for all the three purposes specified. In a number of cases, however, water was not obtained, so that in those cases the digging of wells was only useful for object (*c*), and to some extent for object (*b*), as some of these wells will fill with water when rainfall is normal, and the subsoil water again rises. There is no doubt, however, that a considerable amount of the money was not spent in deepening wells, but used by the people for their own support. One Mámlatdár gave it me privately as his opinion that 50 per cent. of the tagávi for wells was not spent on that object, and that of the remainder, 25 per cent. was spent without securing water, and that the remaining 25 per cent. of the amount was useful in securing a good supply of water for irrigating purposes. This is perhaps understating the cases of the good results from the giving out of tagávi, but it would not be correct to conceal the fact that in reality a large amount of the tagávi is not used for the purpose for which it is given, and that in some cases, even where it is used for wells, no water is obtained. It may be noted in favour of the tagávi system that people who received tagávi in 1897 and paid back their instalments punctually again, asked for it in 1900, which shows that after having had full experience of the tagávi system they see the benefits of it. Personally, I am strongly in favour of the tagávi system, but consider that it requires careful examination and perhaps some modifications, in particular in regard to the agency by which the money is given out, as the Mámlatdárs have not sufficient time to attend to this very important work.

(15) Road works were first undertaken by the Táluka Local Boards, but this only lasted for a very short time.

(16) I do not remember for certain the system of task at the test works, or whether they were taken irrespective of sex, but tasks were strictly enforced.

(17) Payment was made, as far as I remember, in strict proportion to results, and there was no allowance to dependants.

(18) It was found that there was much demand for work and that the wage earned on the test works was very small, so it was judged advisable to turn them into regular relief works. This occurred very soon after my arrival at the beginning of November, and so I do not accurately know the details of the test works. . My own view, from the experience which I obtained about these test works, was that they were not really proper test works, because the wages paid were not enough to provide both for the workers and their children. It appeared to me that in future either—(I) there should be no test works but regular relief works begun at once (and with due deference I may say that I do not see much advantage in instituting test works in preference to regular relief works at all); or—(II) the payment on the test works should be more liberal

than it was at first in this famine in the Nagar District, so that enough may be earned both for the worker and his dependants.

(19) Metal-breaking works, and very soon after that large irrigation works, were opened. Large works were first opened.

(20) These works were under the control of the Public Works Department. The same plan was adopted as in 1897; so that there was no difficulty in deciding the scale of the supervising establishment. The establishment was obtained without any appreciable delay, and the works were opened soon, though in some cases all applicants could not be taken at first. The Assistant Engineer in charge of the Máldevi Tank took on 20,000 within three weeks of the opening of the work (5,000 in one day); which relieved the pressure in that part of the district. Tools and plant were generally available at once.

(21) The works were not divided into charges regularly, but on a large work like the Ojhar Right Bank Canal there were, when the famine was at its height, three different divisions with from 6,000 to 10,000 in each. On the other hand, at the Máldevi Tank where the numbers were once over 26,000, there was one Civil Officer with a Military pensioner as an assistant, and one Medical Officer, the whole work being under the charge of the Assistant Engineer.

(22) Generally speaking, each work of 10,000 and under had one Public Works Officer, one Special Civil Officer, and as a rule a Hospital Assistant (at first there were not many Hospital Assistants, their number increased as the year went on). The rank of the officers, particularly of the Public Works Officer, varied considerably, and I cannot give accurately the pay of the Public Works or Medical Officers. The kárkúns under the Special Civil Officer were paid Rs. 10, except one who was paid Rs. 15. All the arrangements made in 1897 regarding hutting, sanitation, &c., were at once put into force. The Special Civil Officers attended to all the matters noted in this question until the arrival of the Hospital Assistants, and then the latter attended to all medical matters, and assisted in supervising sanitation, &c. No difficulty was experienced in these matters, as the rules in force in 1897 were well known to the Special Civil Officers, and several of them had been Special Civil Officers in the previous famine.

(23) Admission to the works was free from the commencement; no system of selection by tickets was tried at all. A distance test was not enforced, but residence on the work was enforced as far as possible soon after the works were opened.

(24) One work of 10,000 is suitable for a táluka of 100,000, at least if the demand for work is not very great. The fewer works there are the better; for instance, if 30,000 persons require work in three tálukas, it is much better that they should be

employed at one work of 30,000 than at three works of 10,000. The very large works should be turned into smaller works of from 5,000 to 10,000, when the cholera season comes on. The difficulty in a severe famine is that one cannot help giving work to the people near their villages, and thus the works are crowded up with people not really in need of relief. It was only in the Akola Táluka where there was only one work (the Máldevi Tank) that people came from a distance of 30 miles or so to the work ; in the other tálukas there were more than one work almost from the beginning, but this was only because it was necessitated by the large demand for relief work.

(25) The Public Works Officers were not subordinate to the Civil authorities in regard to all purely departmental matters. If, however, the Civil authorities, *i.e.*, the Assistant Collector, Mámlatdár or the Special Civil Officer found that there was anything wrong in the Public Works Department arrangements, he could bring the matter to the notice of his superior Civil Officer.

(26) There was a Civil Officer for every charge of 10,000 and under, except at Máldevi, where there were only one Civil Officer and an Assistant for 20,000 or so. The pay of the Civil Officer was from Rs. 50 upwards to, I believe, about Rs. 85 ; he was a kárkún, generally from the Mámlatdár's office, on Rs. 25 up to Rs. 50 or 60. Usually a Head Kárkún was posted to each large work. It was not the business of the Civil Officer to assure himsef that the measurements were correctly made, though he could report if he thought that they were wrong in any way.

The Civil Officer was directly responsible for the matters mentioned at the end of paragraph 426 of the Famine Commission Report of 1898, except Nos. III and VIII. He had, however, also to report in his diary if the wages were not satisfactory, and he had also to be present at the payment of a certain number of the workers.

(27) The question of the tasks was not decided at all by the subordinate Civil Officers.

(28) The gangs generally consisted of 50 persons or so under one mukadum, and there were 4 or 5 of such gangs under one kárkun. The gangs generally consisted chiefly of people of the same caste and village. No difficulty was experienced in making up the gangs or carrying out this result. In many cases also sub-gangs were made, and payment to persons of the sub-gangs was made according to the work done by the sub-gang, and not by the whole gang.

(29) The classification of labourers and their wage scale was in accordance with the classification and wage scale of paragraph 445 of the Report of the Famine Commission. The only difference was that a penal wage was introduced and people were fined down to this minimum. This departure from the Famine Commission Report was undoubtedly justified, both—

(*a*) from the administrative point of view;

(*b*) from the point of view of economy.

The scale of the Famine Commission Report together with the use of the penal wage is a satisfactory solution of the question of the classification of workers. No further alteration in the classification is desirable.

(30) No distinction is necessary. The practice is in reality to put strong men into class I and weak men and women into class II. This system works satisfactorily, and the absence of distinction did not lead to any difficulty. From a financial point of view no alteration in the system is required. It is true that on the works there are many more women than men, and the output of work is thereby decreased; but this is unavoidable, and cannot be fairly met by reducing the wages of the women.

(31) The Code task system was introduced after the system of payment by results had been adopted for a short time. The two systems were not carried out simultaneously, at any rate for any length of time, either (*a*) in the same sub-division or (*b*) on the same work.

(32) The question whether payment by results is suited to actual famine or not appears to me to be a question which requires careful investigation, particularly in those districts where such a system had been introduced. The Famine Code system with a penal wage seems sufficiently strict for districts where famine is severe and where people work fairly well; but I should not be at all prepared to say that payment by results is unsuited to actual famine, or that it is a system which might not be judiciously extended, special care being taken to look after any who are not fit to do the task work.

(33) Full task was exacted at the outset, and was not graduated to the class of workers, nor was allowance made for distances. Subsequent changes in the task were in the direction of greater leniency. The reason why this alteration was made was that the workers under the system at first in force were earning low wages, and it was considered that they were not able to do the full task. It was probably the case that at the very commencement the tasks were somewhat unduly severe. The alterations applied to all classes of persons.

(34) The scale of wages was certainly adequate. I would not say that it was unduly liberal, but it erred, if anything, on the side of liberality. The condition of the workers was not injuriously affected by the rate of wages. The workers undoubtedly in some cases did save some of their money, particularly the meat-eating classes; as an instance of this it may be mentioned that at the Kapurvádi work a collection was made to have a "tamásha" on one of the religious festivals. Copper coin returned freely to the Banias on the works except at the very beginning of the famine.

(35) A rest-day wage was given. This method is better than the other method mentioned in this question.

(36) My experience leads me to think that the minimum wage is too high, and that fining for short work should be continued down to the penal wage.

(37) First of all there was payment by results for a short time, then the minimum wage, and soon after that again the penal wage. The penal wage was the wage generally earned for a time on some of the works, but it was not the wage generally earned for a long time. The effects of it was not bad when it did last, but it lasted as a general wage hardly long enough to enable one to test fully whether it is a sufficient wage to support large numbers in good condition for a considerable time or not. As a rule however, the meat-eating classes can support themselves on this wage when meat is cheap, and those who do not eat meat are chiefly Maráthas, who have frequently a certain amount of money beyond what they earn on the work.

(38) Payments were made weekly. More frequent payment does not appear to me desirable, so that it is hardly necessary to consider whether it is practicable or not. I would say that weekly payment is not only as good as but better than daily payment, because there is less scope for fraud in weekly payments.

(39) People were paid weekly when they first came on a relief work. Some of the workers undoubtedly fell into the debt of the Bania owing to payment not being daily; to meet this difficulty chits on the Banias were given for a time by the Civil Officer. This, however, did not meet the difficulty very well, and the better system seems to be to give the Civil Officer leave to feed from the kitchen for the first week, in addition to their payment, those who are really in want of food; this plan, too, was adopted in some cases.

(40) Payment was made to the individual, not to the head of the gang. Individual payment entails very great labour on the Public Works Department, but I think that it is necessary in order that the money should actually reach the workers.

(41) I cannot supply this information. People remained long on relief works on the penal wage.

(42) Payment by results was in force for such a short time at the beginning of the famine, that it is hardly worth considering. The system was that of unlimited piece-work at that time.

(43) The minimum wage was that laid down in the Famine Code. Children and dependants were from the beginning fed in the kitchen. People who were weakly and old, but not altogether unfit for work, were put in weakly gangs, which were not paid less than the minimum, they were not given piece-work at favourable rates. The former system, that of the minimum wages, is preferable.

(44) Contractors were not employed at all except for the supply of large blocks of stones, &c.

(45) Musters were kept when the payment by result system was in force.

(46) Prices scale was fixed on the report of the Mámlatdár. Jowári was taken as the base for this scale wage, subsequently bájri was taken when that became cheaper than jowári. As far as I remember, rice was not taken as the base, though it was used for a time in kitchens. Nágli was used as base in Akola, the hill táluka.

(47) The Civil Officer admitted and classified the labourers in accordance with the Famine Code; they were then sent to the Public Works Department. The Public Works Department managed all the camp arrangement and constructed all camp buildings. It also attended to the providing of tools, making and measuring of the work, the payment of wages and imposition of fines. The Civil Officer provided for dependants and was chiefly responsible for the water-supply, and the hospital arrangements if there was no Hospital Assistant. All the arrangements as regards the opening of the work were similar to those made in 1897.

(48) I am unable to give accurate information on this point, so I leave it unanswered.

(49) People were not drafted from large to small works.

(50) There were no small works in the Nágar District except for aboriginal tribes, especially the Thákors; so I can only give information for these works. These works too were not really village works but small road works under Civil Agency. There were 4 or 5 works of this kind carried out altogether; they were started because the Thákors would not go to the large relief works. Afterwards some Kolis as well as Thákors were taken on these small works. No other castes were taken on.

(51) Thákors and a few Kolis, &c.

(52) Under Civil Agency.

(1) By direct management.

(53) No answer required.

(54) Do.

(55) The Code system was introduced, the maximum wage paid and the children were paid. It was not found necessary to fine the people as they all worked well. They are in fact very good workers, it is only that they do not like to go far from their villages and also do not like to mix up with people of the plains.

(56) Only Thákors and a few Kolis accepted.

(57) No answer required.

(58) I do not see any advantage in small relief works as compared with large ones, except that in the cholera season on small relief works cholera would perhaps not be so bad. To check cholera, however, I think that the only thing that can be usefully done is not to have relief works of more than 10,000 in one place in the cholera season, and

to enforce sanitary measures very strictly. Small works are very useful for aboriginal tribes such as Thákors, who will not go to large relief works. Otherwise the larger the work is the better, because there is less chance of fraud and of waste of money, provided of course that the large works are really useful works.

(59) The aboriginal tribes in my Division were the Kolis and Thákors of the Akola Táluka. There are many Kolis in the táluka and they went to relief works without much difficulty. They all went to the Máldevi Tank, which was a popular work, and where the people were treated particularly well. They, however, were timid people, and when cholera broke out on the work they all left it for a time. They in fact also suffered more from cholera than other castes, probably because they will not obey sanitary regulations properly, and are more panic-stricken than other castes. The Kolis, in short, can be dealt with like other people of the Nagar District except that they require special watching and indulgent treatment.

The Thákors, on the other hand, would not go from the hill villages to the large works. The small relief works were very successful, for it was astonishing how well the Thákors worked when they got into good condition. The number of Thákors is small, perhaps 3,000 or 4,000 in the Akola and Sangamner tálukas together.

(60) No such works were opened.

(61) Do.

(62) Weavers were relieved in their own craft in the Municipal towns of Sangamner and Bhingar. This work, however, was not begun till somewhat late in the famine.

(63) The weavers do not like to go to relief works, though they will, as a matter of fact, go there rather than starve; nor are they physically unfit for relief works, except a very few of them.

(64) The relief for weavers was successful from the point of view of relief. I cannot say whether it was successful from the point of view of economy or not. In regard to relief for weavers, it cannot be said that as a class they are unfit for ordinary labour, and there is therefore really no necessity for special relief for them in their own craft. I do not therefore think that relief for weavers needs to be extended. At the same time in large towns where there are many weavers, and where there are probably some gentlemen who are willing to supervise the work for nothing, assistance of the nature of that given in the Ahmednagar District may well be given. In Sangamner Rs. 5,000 were lent in loans of Rs. 25 free of interest to each of 200 weaving families, on the security of the better class weavers. If it is found that this money can be recovered the same system might be adopted elsewhere. In such cases Government might well bear half the loss which may occur, and the Municipality the other half.

(65) Forests were thrown open, and grass was imported. A large amount of grass was imported and it was readily purchased. The grass from the Central Provinces was very good; that from the Konkan was inferior and of little use in keeping cattle alive. The importation of grass is undoubtedly useful, but only if it is really good grass. Special care is also required to see that money is not wasted owing to the grass not being sent punctually, or being sent to places where it is not required.

(66) Please see answer No. 65.

(67) Dependants were relieved by cooked food on the large works, and either by cash or uncooked grain on the small works for Thákors.

(68) All dependants on relief works were fed in the kitchen, while those who were on the dole in the villages were relieved by uncooked grain. Later on two kitchens were opened at two of the táluka towns and there was also a poor-house at Ahmednagar itself from the beginning. It was found more convenient to give the dole in the villages rather than feed these persons in kitchens, because the numbers on the dole in each particular village or group of villages were small. On the other hand, it was thought to be better to feed the dependants on works in the kitchens rather than to give them money or uncooked food.

(69) Practically no one was given the dole except those who were unfit to work; in fact the classes who are laid down in the Bombay Famine Code as fit recipients of the dole. A proposal was made to put some agriculturists on the dole for sowing operations, but practically very few of such persons were put on the dole, and these too only for a week or two. Those who were put on the dole for agricultural purposes were chiefly land-owning Kolis of the hill villages of the Akola Táluka.

(70) One poor-house at Ahmednagar only. This was under the supervision of the Personal Assistant to the Collector, and I do not know details about it.

(71) It was used for vagrants and immigrants. Persons were not sent there for any reason from relief works.

(72). Persons were sent from the poor-houses to the relief works when fit to work, also drafted to the Hyderabad State, if they came from there. Generally speaking, they were not sent back to their villages if they came from the Ahmednagar District.

(73) Two kitchens were opened shortly before the beginning of the rains. They were expected to serve a radius of 4 miles, but only for those of the dole people who could walk from the villages to the village where the kitchen was.

(74) The same ration is on kitchens, on relief works and the same rules were in force. The meals were given at fixed times, and the people had to feed on the premises.

(75) The two kitchens were within 4 miles of any relief work; they were not opened within 4 miles of relief works.

(76) The persons who would be fit for the dole only were fed at the kitchens and also a few vagrants who were in want of food. Others were not admitted to the kitchens.

(77) The ration of the poor-house and the grain were the same as in the kitchens on relief works, the grain was most of the time jowári. There was a hospital attached to the poor-house for those who were ill or emaciated.

(78) The dole list was drawn up originally by the village officers and at first checked by the Circle Inspectors, whose numbers in each táluka was doubled in the famine, and whose chief duty it was to manage the dole distribution, and who were in fact responsible for the register. Their work was checked by the Relief Head Kárkúns, the Mámlatdár and the Assistant Collector, and the Collector, in turn, that is, the Revenue officers of the four grades who supervised relief in villages. The Circle Inspectors were expected to visit each village in their circle about every 10 days. In the rains the number of Circle Inspectors in the Akola Táluka was increased, so that each Circle Inspector should visit each village at least once a week. The superior officers visited the villages at intervals.

(79) Payment was made in grain daily at the central villages, and weekly for those who did not live in the village where grain was distributed. The grain was given out at the chavdi or elsewhere in a central village, and dole recipients from surrounding villages went each week to the central village to get their grain, or else relations went for them.

(80) None except those of the Akola Táluka referred to in answer 69.

(81) Marátha cooks were employed. There was no reluctance to take cooked food shown by any class. There were only very occasionally one or two persons of higher castes who were given uncooked food.

(82) A kárkún was appointed to be in charge of each of the two kitchens. They were directly under the check of the permanent Head Kárkúns, who could easily supervise them as they were both in the táluka towns.

(83) No cheap grain shops were opened.

(84) No answer required.

(85) Altogether less than half of the land revenue was collected, the rest was suspended; by the time I left the district it had not been decided how much should be remitted.

(86) The suspensions were based both on the crop and on the general capacity of the individual to pay; the anna crop had to be less than 4 annas and also the men had to be unable to pay. The Mámlatdár decided from his general knowledge

whether a man was able to pay or not; and then reported for orders to the Collector through the Assistant Collector.

(87) Suspensions and remissions were determined after the collection of the revenue began. Practically the Mámlatdárs collected what they would collect without pressure, and reported the rest for suspension. This seems to be the best system possible, as it is not possible to investigate carefully each individual case.

(88) There are no jamindári tracts.

(89) Very little pressure was used in the Nagar District, and I think that sufficient relief in regard to suspensions was given. In fact in the Ráhuri Táluka undoubtedly more might well have been collected if the Mámlatdár had been more energetic. In the other tálukas my own view is that just about the right amount was collected. If more pressure had been put on the people they would have paid the revenue out of the money given as tagái; in fact a few probably did so, as it was. The amount of remissions had not yet been decided, but I do not think that many remissions should be given because it cannot be decided in what cases there should be remissions. The second half of the question is practically answered in the above.

(90) The number on relief exceeded 15 per cent. of the population for some time. The reason for this was that the famine was a severe famine and closely following a previous famine. The real fact, however, is that the estimate of 15 per cent. of the population as likely to be relieved is too low if the rules of the Code are carried out. If these rules had been in force in 1877 and the people at that time had been accustomed to go to relief works, I imagine that the numbers on relief would have been at least 25 per cent. of the population; similarly, when another severe famine occurs 25 per cent. of the population again is to be expected on relief works if the present system of relief is to still continue in force. The expected proportion of the population that is likely to be relieved in a future severe famine should, I think, be estimated at 25 per cent. instead of 15 per cent. of the population.

(91) The amount of relief given was at no period defective. Fault was found with the Public Works Department at the beginning of the famine for fining the workers too much; it is a question, however, whether somewhat strict measures are not advisable at the commencement of the famine, so that those who can do so will emigrate to districts where crops are better. In any case the action of the Public Works Department did not injuriously affect the people in general. Relief, on the other hand, was perhaps excessive in the Akola Táluka. As the Famine Commission of 1898 had noted that the hill tribes required special attention, great indulgence was shown to them, perhaps more than, as it turned out, was necessary, because the famine was not so severe as in 1897 in that táluka. The

death-rate on the Máldevi Tank in that táluka, apart from cholera, was throughout below normal.

(92) Most of the people in relief works were the non-land-owning classes; later on some of the land-owning classes also came on to the works. The proportion of land-owning classes on the works cannot be stated, but I do not think that they were very numerous, though some landowners no doubt sent part of their family to the works. Many of the Maráthas on the works, in fact probably most of them, were not landowners, but only agricultural labourers.

(93) People are no doubt more ready to come on relief than they were formerly. The reason is that they do not suspect the intention of Government now, and also they do not mind taking relief from Government or mixing with people of lower castes so much as they did formerly.

(94) There is no doubt a contraction of private credit because the people are much indebted to Government and Sowkars. This is particularly the case in the hill villages. Sowkars tend to leave that part altogether or if they stay there will not lend money.

People also save their money and go to relief works at once more than they did formerly, the Marátha classes in particular. The tests of the Code are barely sufficient to keep off those who are not in need of relief; such persons always come to works from the neighbouring villages. The enforcement of residence on camp, the keeping of children in the kitchens, and other camp discipline, however, help to keep such persons off the work.

(96) Strict camp discipline and fining at least down to the penal wage are the only tests which I think can be enforced. Also the fewer works there are the better, as by this means a distance test is enforced for most villages. I do not think that any method of selection is suitable.

(97) The village officers supply the death-rate for villages and the Hospital Assistant and Civil Officer for relief works.

(98) Where statistics show a high death-rate it is always attributable to one or more of three causes:

1 Cholera.

2 Infant mortality.

3 Immigration from the Hyderabad State.

These are the three matters which require special attention if the death-rate is to be kept lower in future famines, otherwise abnormal mortality was successfully prevalent; even though there was a good deal of dysentery at the beginning of the rains this did not appreciably increase the death-rate.

(99) The impure and insufficient water-supply was the main cause of cholera, which was prevalent from April to September and was bad in some places at various times, particularly in the Akola Táluka, where the water-supply was particularly bad and could

not be improved. A large sum was spent in deepening wells and digging holes in the beds of streams. Permanganate was used both in villages and on works, especially on the latter. It was used every two or three days as a rule in the places where cholera was prevalent.

(100) Sanitation was supervised by the Civil Officers and Hospital Assistants on relief works, and by the superintendent of poor-houses and kitchens. Latrines for males and females were constructed and the water-supply was protected, and special persons employed for distributing the water. These arrangements were generally sufficient, but the water-supply arrangements in particular were not sufficiently good until the arrival of several Staff Corps officers who enforced sanitation strictly. Till then the supervising staff was hardly numerous enough. After the arrival of these officers there was more cholera in villages than on the works.

(101) Grain was regularly inspected by Civil Officers and Supervising Officers. Unwholesome grain was found from time to time but was removed. I myself do not think that unwholesome grain, so much as polluted water, was the cause of cholera and other illness.

(102) The people supplemented their food with wild herbs especially in the rains and particularly in the hill villages. This was to some extent the cause of the increase of dysentery at that time. The people, however, get on all right with a mixture of grain and herbs, and breads were frequently made in this way.

(103) There was much immigration from the Hyderabad State into the Ahmednagar Táluka which borders on that State. I am unable to give the proportion of such immigrants, because, for one thing, they concealed the fact that they came from Hyderabad State; there were many of them at the Bhatodi Tank work, which was close to the border of the Hyderabad State.

(104) The mortality cannot be given, but it was far higher at the Bhatodi Tank and also at a smaller work in that neighbourhood than anywhere else in the sub-division. There is no doubt at all that this very high mortality was due almost entirely to immigrants from the Hyderabad State, where works were not started soon enough. The Bhatodi Tank had a death-rate for some time about ten times as much as that recorded on the Maldevi Tank.

(*a*) Orphans were given chiefly to friends and relations; a few of them were sent to Missionaries. Some of the caste-people generally came forward to take care of such children when the famine is over.

(105) No suggestion to make as regards the objects of the fund. In two of my tálukas all the money for seed and bullocks was given out by the American Mission, which gave much money for this object; so that there was more available for

other tálukas. This system worked very well and prevented confusion between Mission money and charitable fund money. In future certain areas might always be given to Missionaries and in these areas distribution should be made by them only. I have no other suggestion to offer.

(106) No complaints were heard. There were practically no defects in the Railway carriage.

(107) This information was supplied by the Station Masters. I do not know details regarding it.

(108) No such complaints were heard. There was in fact very little private demand for labour.

(109) (*a*). There has been an increase of double cropping in recent years, though I cannot give details. This is probably one reason for the alleged deterioration of the soil in recent years.

(*b*) I cannot supply this information.

(110) The paying of wages in grain prevails in the district. The tendency is to substitute a cash for a grain wage. Cash wages did not rise in sympathy with the rise in prices; on the contrary, they decreased somewhat in spite of the rise in prices.

(111) The main departure from the Famine Code was the general use of the penal wage. This was undoubtedly justified and was a useful measure. In all other respects the Code was followed, as far as I can remember.

(112) Staff Corps officers and officers of the Native army were used; there were, I think, no non-commissioned officers of the British army. Men were obtained from various other departments, such as the Postal Department, though I think that even more such persons might well be obtained from other departments, as for instance the Forest Department. As far as possible, I think that permanent men from all departments and all parts of India should be obtained, rather than that temporary men should be obtained for famine; as temporary men cannot safely be trusted with such important work.

(113) Non-official agency was used for the distribut on of charitable fund money and included especially

(1) Missionaries.

(2) Local Board members.

The former were very useful, also a few of the latter. The latter also assisted in improving the water-supply.

Non-official agency was also used for supervising relief to weavers and was of much use for this purpose.

I do not think that there is any scope for the extension of such agency.

One gentleman who is a Honorary First Class Magistrate relieved the Government officials of much judicial work.

(114) The number of people seeking relief was kept down by the payment by results system at first in force, though it was high even then. As soon as the Code system with a minimum according to the Code was introduced, the number ran up rapidly, and soon nearly reached the figure of 200,000. The penal wage, which was afterwards introduced, kept the numbers steady, and after that for a long time they remained almost stationary. Any subsequent measures of the nature referred to in this question did not permanently alter the numbers on relief, though they caused temporary alterations. For instance, if people were drafted to a distance, many did not go to the work to which they were sent, but drafted back to the former work or some other work. After the first 2 or 3 months, however, there were no general changes in the way of relief administration.

The death-rate never did increase to any appreciable extent except for the reasons mentioned above, I Cholera, II Infant mortality, and III Immigration. The alterations in the first few months of the famine had little effect on the death-rate and after that there were no important alterations.

(115) I do not think that large relief works disorganise family life or weaken social restraints to any appreciable extent.

Nothing requires to be done in regard to this matter. The abandonment of wives and children did take place, particularly when the dependants were not fed on the works, but this had nothing to do with the massing of people on large works.

All the above answers are meant to apply merely to the Ahmednagar District, though they would also generally be suitable to the Sholápur District.

P. E. PERCIVAL,
Assistant Collector.

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Mr. R. B. Wood, I.C.S.

Replies by Mr. R. B. Wood, I.C.S., Assistant Collector, Kaira, to the questions drawn up by the Famine Commission.

Large Public Works.

32. A pure system of payment by results will never adequately meet a severe famine. A large proportion of the workers are not capable of doing more than nominal work, and the condition of a majority of them, when they first come on to a large work, is usually too run down for them to be able to do much.

When a large work has settled down, and the people have recovered their condition, and the abilities of the different classes have become known, payment by results should be largely substituted for ordinary task work.

Even if started as early as possible, works could not be conducted throughout on a system of payment by results, since the people always hang back to the last minute. When finally they give up hope, they come on the works with a rush, many of them too weak or too unaccustomed to labour, to allow of payment by results being started at once.

34. The scale of wages adopted was certainly not inadequate. The condition of all the workers who had been for any time on a work was good: often a marked contrast to that of people who persisted in staying in their villages.

Many of the Dheds, a hard working and careful class, saved money on the works, and at the break of the rains sent it to their villages and had their lands tilled by labourers, while they stayed on the works and saved more. A few of the other castes did the same, but to a much smaller degree.

Copper coin returned freely to the Banias, but I cannot say what proportion of the money paid to the people returned to them.

38. Payment was made daily to all new comers on the work for the first week at the Ladwell work and after that weekly. I saw no reason to think that any more frequent payment was desirable.

39. People were paid daily when they first came on to the relief work, for a week. After that they were paid weekly, like all the rest.

I had no reason to think that the people were ever thrown into the hands of the Banias by being paid weekly. The Banias never gave credit to any extent.

40. Payment was made to the individual. The gangs on large works are too big for payment to the gang head to be advisable.

44. Contractors were not employed at any stage of the famine.

Small Village Works.

52. At the close of the famine, small village works were opened in this (Kapadvanj) táluka in order to draw the people back to their villages from the large works, and to afford employment to labourers until they could get ordinary private work.

Three such works were opened at the beginning of June 1900 in the expectation of an early monsoon. When the monsoon failed, these were still kept open, though the large works had not been closed. When the Ladwell work in Kapadvanj Táluka was closed towards the end of September, seven more were opened, on the piece-work system with a maximum wage, to supplement private labour.

53. The village works included—

Repairs to drinking water and cattle tanks.

Repairs to irrigation tanks.

Repairs to village roads.

54. The village works were conducted under the supervision of the Civil Agency, by direct management. There was an overseer for every three works and a mucádam for every work. The bills were prepared by the overseer, and the money paid to the workers by the overseer himself or more often by the village Taláti. Payments were made only to the heads of the gangs, which never contained more than 15 persons.

56. No attempt was made to work the code task system.

The scale of wages was fixed by the Collector. The daily unit of work for men, women and children was fixed and the rate of pay for it settled. Excess work was not paid extra, but pay was proportionately reduced for all deficient work. There was thus no minimum wage, but only a maximum wage, which was lower than the ordinary market rate for private labour.

Employment was given to all comers.

57. No system of selection of applicants for relief was tried.

59. For the beginning and ending of a famine small village works are most desirable, and in the case of slight famines they might wholly take the place of large works.

Certain preliminaries are however indispensable:

(1) A list of useful small works should be drawn up villagewar for every táluka shewing the particulars of the work, and the amount that can be expended on each.

(2) Against all irrigation works the extent of the present irrigated area, and the extent of any increased area which might be expected after the repairs, should be shewn together with the expected increase in the water-rate, if any.

(3) No work should be begun without an estimate and measurement figures, which should be strictly adhered to.

The works may often be done on the ordinary contract system, advances being made to the contractor where necessary. The contractor may be the village Mukhi. Personally I am in favour of small works on the ordinary contract system at the beginning of a famine. If they prove insufficient, the question rises whether the dependants, women and children, should be given work by instituting small works under Civil Agency, or by opening large works. In thinly populated and backward tracts, I would advocate small works under Civil Agency, for as long as possible.

In thickly populated parts the large works should begin at once. Any interval of small works under Civil Agency results in setting the people against the large works, and they refuse to be satisfied with anything except a work in their own village; and, if the population is large and the famine likely to be severe, the period of big works is bound to come.

At the close of a famine, small works must always, as noted above, form part of any system of relief. At this time it is probably better for them to be under Civil Agency than under contract. This however is a point on which I am still doubtful.

Gratuitous Relief.

68. Dependants received no special relief as dependants, on big or small works.

On the big works, the young children of the workers received meals in the kitchens attached, and there were no other non-working dependants, or if they were, they remained behind in their villages and were relieved by the ordinary village system. The same was the case on the small village works.

69. In July 1900, when I arrived here, gratuitous relief in villages was almost wholly given in the form of uncooked grain, though (4) four kitchens had been opened. It was however believed that the people would refuse to go to the kitchens and that they would prove a failure.

Subsequently the kitchens were extended until there were 31 among the 86 villages of the táluka and the numbers on the kitchens were two-thirds larger than those receiving uncooked grain. The advantages of the kitchens are great, but there are certain disadvantages which prevented them taking the place of relief by doles of uncooked grain altogether.

The advantages of the kitchens as against dole relief are—

(1) They weed out persons not really in need of relief, who would be willing enough to take grain, but will not eat in the kitchens.

(2) The system ensures the persons (especially children) put on relief getting their full rations.

(3) It is easier to check the Banias, and see that the proper rations are supplied.

The disadvantages are that—

(1) Poverty-stricken cultivators, who have to till their lands, cannot spare time to come twice a day to the kitchen.

(2) The daily double walk backwards and forwards from the surrounding villages to the kitchen in the heavy rains, is certainly productive of increased mortality. As the dry dole was, however, given daily instead of weekly, in the village choras, and not in the people's homes, the above disadvantage is not quite peculiar to the kitchens.

70. I have not got the report of 1880. Gratuitous relief was, however, given to the classes mentioned in section 57 of the Bombay Famine Code, and also to ordinary cultivators who had no means or labourers looking after cattle, whose presence in the village was advisable. Further, all children who were evidently starving were put on to the kitchens, whoever their parents might be.

No test was prescribed for admitting people. They were admitted after local inquiry, or more often from their obvious want of flesh and blood.

71. The classes of people most frequenting the Kapadvanj Poor-house were of the Dharala caste; labourers who had started wandering for work, orphans and deserted children, professional beggars, and runaways from the large relief works.

72. The Kapadvanj Poor-house was used as a depôt for vagrants and immigrants, whence they were drafted to the relief works. Men were never sent from the relief works to the poor-houses as a punishment.

73. Yes.

74. Four kitchens had been opened in this táluka before the rains broke on 25th July. Twenty-seven were subsequently opened.

The radius of a kitchen was at first expected to be 4 or 5 miles, but this was found to be too great. Finally two miles at the outside was taken as the radius.

75. The ration provided in kitchens was—

	Adults.	Children between 8 and 12.	Children below 8.
	Oz.	Oz.	Oz.
Rice . . .	16	9½	7½
Dál . . .	2	1	1
Salt . . .	½	⅛	⅛

In some kitchens ghee or oil and condiments were also given, the ration of rice being proportionately diminished.

All kitchen inmates were compelled to eat their food in the kitchen and on no account were allowed to take it away; otherwise the very *raison d'être* of a kitchen would have vanished.

76. No such limit was fixed.

A kitchen for the children of the workers was opened at all the relief works.

77. Admission to kitchens could only be made by the Circle Inspector or his superior officials, or by the village Panch.

74. The poor-house ration was that laid down in the Famine Code; but it was varied by the Hospital Assistant to meet cases of illness or weakness, chiefly in the direction of milk-dieting.

75. The village gratuitous relief lists were drawn up by the Circle Inspectors helped by the village Panch. They were checked by the Mámlatdár, Divisional Officer, Táluka Relief Officer and Collector in their tours. The recipients were inspected weekly by the Circle Inspectors and as often as possible by the superior Táluka officials.

76. Payment was made (*a*) in grain, (*b*) daily, and (*c*) in the village choras. In a few cases, owing to the distance of a small village from the main village, the dole recipients were allowed to take their allowance for the week weekly.

77. This question was mostly answered in section 70 above.

Gratuitous relief to those additional classes was discontinued.

In the case of labourers, as soon as there was private employment available, from the middle of August.

In the case of small cultivators, as soon as the bájri harvest commenced to be ready.

78. The caste of the cooks employed was, as far as possible, that of the highest caste people attending the kitchen. This was arranged automatically by commandeering the highest caste people coming to the kitchen as cooks.

There was no caste that at one kitchen or another did not take cooked food without difficulty. At some kitchens, however, Grássias and Patidárs and Rabáris and Bráhmins refused to attend, or attended with reluctance and under the threat of being outcasted by their fellow castemen.

As a rule this was due to the intrigues of individuals who wished to recover the system of doles of grain.

The different castes did not of course sit with each other, but they sat within the same enclosure.

79. The persons in charge of the kitchens were chosen, as far as possible, from respectable educated persons in the villages themselves; in one case the village priest, in another a school master, and so on. Where none were available, candidates from the táluka kacheri were sent, but they were never so good as the former class.

These kitchen superintendents, as they were called, were paid R10 a month, and supervised by the Circle Inspectors and táluka officials, as well as by the village officials and Panch. They had to keep a muster roll of the kitchen inmates, and hold

roll-call before each meal, checking those who were present or absent. An abstract of those present at the meal was then made, and an indent based upon those figures made to the Bania for the next meal. An inspecting officer could tell at once if things were going straight or not.

80-81. Only one cheap grain shop for the sale of maize was opened in this táluka by the Missionaries. It was on too small a scale to deduce anything from.

SUSPENSIONS AND REMISSIONS OF LAND REVENUE.

86. On this point I have been struck, ever since my arrival in this Presidency, by the absolute non-existence of any data on which remission or suspension of revenue can automatically be made. Enquiries are now being made in this táluka as to what land revenue should be remitted, but the village accounts are so imperfect, and the whole question so experimental, that it is doubtful if the relief will reach all the right persons. The remedy for the future is so simple and yet so important, that I venture to lay the greatest stress upon it.

(1) In village account No. 3, the Pahani Patrak, there are five columns, for five successive years, and in the column for each year the crops planted in each survey number of the village are noted. There is, however, nothing to shew what the *yield* of the crop is. It may be a 16-anna crop: it may be a total failure. There is absolutely no record. Columns should be added for each year as under:

Yield in annas noted by the Taláti.	Do as noted by the Circle Inspector.	Remarks of Mámlatdar or Divisional Officer.

The Taláti should enter the yield against every field. The Circle Inspector should check at least 20 per cent., and in years of any scarcity the Mámlatdár or Divisional Officer should check 10 per cent. When I suggested the adoption of this plan, as far as possible, to the then Collector, Mr. Quin, last autumn, he said it was quite impracticable. It is, however, universally in force in the Madras Presidency; and the Taláti of at least one village in this district actually noted the anna yield against every field in his village. The additional columns necessary would of course limit the Pahani Patrak to perhaps two years instead of five. This account is, however, an annual one in Madras and there is no point in making it quinquennial.

(2) The village remission account would then be prepared from the Pahani Patrak and be placed before the Jamábandi Officer every year. Government orders as to the principles on which remission should be granted would be necessary. In ordinary years only wet lands on which the paddy had failed through deficiency or excess of water would be entered, and the water-rate would be remitted. The assessment on dry lands would usually be never remitted, and dry lands would not

be entered in the remission statement without special cause. In famine years, however, and years following famine years, all lands, wet or dry, on which crops had failed would be entered in this account from the Pahani Patrak, and the Jamábandi officer would pass his orders in accordance with the Government standing orders on the subject.

91. Private credit, especially in the small villages, practically disappeared. So far as I could ascertain, most of the people had exhausted their own resources before they would come to works, or to kitchens. They were, however, eager to be put on the list of dry dole recipients, even when they could afford to maintain themselves.

95. In this táluka statistics shewed a very high mortality from August to November. Before that I have no personal knowledge. During August and September the deaths were largely due to exposure to the heavy rains, following a long period during which the people had barely maintained themselves and had run down from unaccustomed work in the hot weather. Further causes were their deprivation of curds and whey due to the death of nearly all the milch cattle, and in October and November almost universal fever. Unsuitable and insufficient food, especially in the earlier hot weather months, was a factor in the high death-rate though indirectly rather than directly.

GENERAL.

96. I came across no instance of either impure or insufficient water-supply. Permanganate of potash was used to disinfect nearly all village wells twice a week regularly.

97. No special sanitary arrangements were required at the kitchens.

98. The Civil officers inspected the shops regularly, and I heard of no case of the sale of inferior or unwholesome grain.

100. No proper statistics were kept on this point. There was however considerable immigration from Native States.

102. At the end of the famine nearly all the orphans in villages were claimed by relations. The few that were not claimed were sent to Missionary orphanages in Nadiád.

105. There were several such complaints from land-holders in the villages near the large Ladwell relief work, after the rains had well set in.

110. Non-official agency in this táluka was limited to—

(1) The village Panch to supervise the gratuitous relief.

(2) A committee in Kapadvanj to arrange for the distribution of charitable fund money to the respectable poor.

Lastly, I would refer to a matter that has not been raised in this series of questions: the

disgraceful amount of petty embezzlement that is rampant in all forms of famine relief, and the immense difficulty, often impossibility, of proving it in a Court of law. The commission paid by rayats to village officials on tagávi advanced to them would presumably come under bribery; but the commission paid on advances from charitable and Mission funds has been held by at least one Sessions Judge to be no offence under the Penal Code. Then there are the petty embezzlements on kitchens, on small works, and on large relief works. Some form of summary inquiry and, in the case of conviction, whipping on the spot, would do more to check the evil than anything else. Call it the Famine Fraud Summary Whipping Act. No one who has not had personal experience of the details of famine work can imagine how the whole native establishment is utterly demoralized by the many possibilities of earning a dishonest penny.

Mr. J. S. HEANEY, I.C.S.

Replies by Mr. J. S. Heaney, I.C.S., Assistant Collector, Kaira, to the questions drawn up by the Famine Commission.

SMALL VILLAGE WORKS.

52.—Only three small village works were started in this táluka before the break of the rains, and the maximum attendance at all of them taken together hardly exceeded 500 at any time. I visited one of these small works, at Manjipara village, almost immediately after my arrival. About 50 people were then in attendance. At that time gratuitous relief in the shape of uncooked grain was being given on a large scale. In three villages, all of them within a mile of the small work, there were over 1,000 people on gratuitous relief, of whom about half were children and aged, and the majority of the others fit to work. There were also a very large number of people in these villages whose children were on gratuitous relief.

All these persons absolutely refused to work, and for the moment it was impossible to put pressure on them, as the children who were in a miserable condition would have been the first to suffer. Other parts of the táluka were in a similar condition. By the time kitchens were opened and the children collected into them, the rains had come and field labour was everywhere abundant, so that those who were fit to work got field labour when turned off gratuitous relief; otherwise, work would have had to be extensively provided in the shape of small works.

Later on, when field labour grew less, six small works were opened in different parts of the táluka where labour seemed insufficient, and they served to keep able-bodied labourers off the gratuitous relief lists. The number on all of them never exceeded 1,000, but in addition to the actual relief they afforded they were of great assistance in preventing labourers in the villages from putting in a claim to gratuitous relief on the pretext that they could not get work.

The part played by the small works was insignificant, but might have been considerable if they had been started when the outbreak of cholera drove the people off the large works, or even later, simultaneously with the expansion of gratuitous relief, if the latter had been restricted by means of kitchens to those unable to work.

53.—Tank excavation only.

54.—They were conducted by direct management under the supervision of the Civil agency.

55.—Kárkuns were appointed to each small work. They kept a muster of the workers and generally supervised the work. Overseers were also appointed for about every four small works; they measured up the work and signed the abstracts showing the outturn on which the wages were calculated. Payments were made by the Mámlatdár or Avalkárkuns on receipt of the abstracts referred to above. Owing to the fact that the same overseer had to visit three or four works, and that the week for which payment had to be made everywhere ended on the same day (Wednesday), the measurements were inaccurate, as fresh work had frequently been done for three or four days after the end of the week, before the overseer could come, and payments were correspondingly delayed.

56.—Workers were paid by results, subject to a maximum wage. The maximum wage was 7 pice for a man, 6 for a woman, and 4 for a child, as against 9, 7, 5, respectively, on large public works about the same time. There was no allowance for dependants and no Sunday wage.

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57.—No.

58.—The work referred to in answer to 52 was open at the same time as the large public work at Dákor, five miles away. A considerable number of persons went to the large work, returning daily to their houses, though the small work was close to them. They preferred the more liberal wage on the large work, where the minimum for merely attending was almost equal to their day's wages for the small work. They also receive their wages more regularly on the large work.

59.—Principally among them who are the last to come on relief, there are a large number who are unwilling to attend works unless they can return to their houses daily. When famine reaches its most severe stage these people are gradually reduced in condition, and become despondent, so that they no longer have the energy to take a step, which means the breaking up of their homes, and hang on eking out the gratuitous relief given to their dependants, if it comes in such a shape that they can have access to it, or in hopes of sooner or later receiving gratuitous relief themselves. Small works are, I believe, the best way of meeting the case of such persons.

It is quite possible that large works would have met the case here this year but for the outbreak of cholera which took place at the critical time. It drove thousands off the large works, and caused such a panic that there was no longer any possibility of their affording adequate relief. In fact, during the whole month of May, and for a portion of June, the numbers on relief never reached the figures of the first week in April Again, towards the end of the famine, when it was only necessary to provide intermittent relief to meet short local failures of field labour during the cultivating season, small works seemed very desirable, as they, kept the people on the spot ready for absorption into village life. A bare living wage should, I consider, be the maximum wage in such circumstances, so that there may be no inducement to detain a worker for a moment after he can obtain a livelihood otherwise.

Gratuitous Relief.

69.—The uncooked grain dole was most employed in this táluka. This was originally the only form of gratuitous relief, and roughly speaking 30,000 people out of a population of 96,000 were receiving this form of relief at the end of July, when kitchens were started generally throughout the táluka. It was necessary to give relief to these people. There were no small works, and gratuitous relief was started on a large scale. The result was that just before the break of the rains nearly half the population in some of the poorer villages were on gratuitous relief, virtually no work was being done, and attempts to open small works were unsuccessful, as the majority of the able-bodied could not be induced to attend while they had control over the dole of their dependants, and had every expectation of receiving dole themselves, if they were not already on the lists. In order to ensure the dole reaching the persons for whom it was intended, kitchens were then started, and the children with some difficulty removed from the uncooked grain relief and collected into them to the number of about 7,000. In the meantime the rains had come, field labour was generally available, and the people showed no disinclination to take it up. The number on grain dole was, therefore, reduced as rapidly as possible by removing those who were earning a living by field labour. It was necessary, however, to continue dole to many of the poor cultivators *bona fide* engaged in the cultivation of their own land, who did not receive sufficient takávi or charitable relief to provide both seed and maintenance. To cut off the relief would have either compelled these people to go and labour on the lands of others for hire, or curtail their own cultivation by compelling them to use for maintenance the money they required for cultivation. Attendance at a

kitchen would have taken up too much of the time of a cultivator or labourer; kitchens were, therefore, at that time, an unsuitable form of relief for people who were capable of doing any work. A position of equilibrium seemed to be reached finally, with about 16,000 persons on relief, of whom about 6,000 were in kitchens.

70.—The classes referred to are not known, but as a matter of fact no class distinctions were ever made. The recipients of relief were selected by the village officers and panch in the first place, and the lists were revised by the Circle Inspectors, Aval-kárkuns, Mámlatdárs, and Assistant Collector in charge. A Circle Inspector visited each village at least once a week and the other inspecting officers at irregular intervals. People of all castes and classes were admitted to gratuitous relief. During the time when relief was greatest kitchens had not been opened; and there was no test of any kind, except the willingness to accept dole and to attend musters when required by inspecting officers. It was only in the case of Pátidárs that I found this to be a real test.

74.—(*a*) 3 kitchens.

(*b*) 25 „

The kitchens were intended to serve a radius of two miles.

75.—The ration of the Code was provided, except oil which could not be obtained. Extra grain was given instead of oil. Two meals a day were given, half the ration at each meal. The meals were given morning and evening; the time seldom varied more than an hour at any kitchen. It was necessary to insist strongly on regularity, so that inspecting officer might be able to observe the whole working of the kitchens when making unexpected visits.

The people were compelled to feed on the premises, and were not allowed to take any portion of their food away, and no grown-up relatives were allowed into the enclosures where the children were being fed. It was observed that whenever discipline was relaxed, either the grown-up people stole the food of the children, or the children were induced to bring away their food to relatives. Children rapidly improved in condition when compelled to eat a measured ration under supervision, and after a time it was possible to gauge the degree of discipline with tolerable accuracy in a kitchen from merely observing the condition of the children.

75 (a).—Vide 70 supra.

76 (a).—Payments were made daily in grain, either at the village chaura or the house of the bania who supplied the grain.

77.—Kitchens, as explained in answer to 69, were not generally opened till after the rains broke, and were then largely restricted to children. All children were admitted without any restriction, and endeavours were everywhere made to induce them to attend kitchens. Where children living in outlying villages attended a central kitchen, an adult was in some instances specially given double the ordinary dole for bringing the children to the kitchen. This dole was given at the kitchen once at each meal on production of the children, and ensured regular attendance till the children became accustomed to attending themselves, besides bringing to notice cases of illness for special treatment.

78.—As a rule the cooks were Dharálas, with a separate cook for Mahomedans in villages where they were on the kitchen lists. There never were any *bona fide* objections made. From time to time, as the kitchens were opened and the children sent to them, the parents protested. The real reason was that the uncooked dole, over which the parents had full control, was stopped by sending the

children to kitchens. Except Mahomedans, Dharálas and lower castes who eat food cooked by Dharálas, there were no people in kitchens.

79.—Kárkuns on Rs. 10 or 12 were appointed to all kitchens, except a few very small ones. The attendance, accounts and food were checked at least once a week by Circle Inspectors, and at irregular intervals by other inspecting officers.

The population of this táluka is about 96,000.

87.—From April onwards the number of people in receipt of relief was in excess of 15 per cent. of the population. About the middle of April there were in round numbers 14,000 on works and 2,000 on gratuitous relief. A severe epidemic of cholera then occurred in the táluka, and the numbers on works fluctuated very much in the next two months, averaging about 9,000 in May and 14,000 in June, while the numbers on gratuitous relief rose from 2,000 to 5,000. From the beginning of July the number of persons on works gradually diminished as gratuitous relief was extended, and when the rains broke on the 27th July there were about 10,000 on works and 26,000 on gratuitous relief. The extent of the relief I consider a necessity due to the severity of the famine and to the fact that about 70 per cent. of the population are Dharálas, Kolis and others of lower caste, whose circumstances are, I believe, always very poor, and who are very improvident, if the word improvidence can be applied to the mild dissipations of extreme poverty.

88—During the latter half of July and early in August relief may perhaps be considered excessive, as being too largely gratuitous. Demoralization had set in and large numbers of able-bodied persons would not attend "small" works close to them, though some of them had attended "large" works before gratuitous relief on the large scale was started.

Without kitchens it was impossible to restrict the gratuitous relief in a family to selected individuals, and the condition, more especially of the children, was so bad that it was out of the question to put pressure on them able to work by refusing relief to their dependants. The relief was, therefore, defective, in that there were many more people living on it than it was able to support properly, and at the same time demoralizing. The willingness with which people took up field labour as soon as the rains broke showed, however, that the demoralization had not been long continued enough to be serious. Further, I consider that the relief was very defective from about the middle of April up to the middle of July. In the middle of April there were, in round numbers, 14,000 on works and 2,000 on gratuitous relief. In a country where famines are so rare as in Gujarát I think the number of persons on works would furnish an under-estimate of the number of persons in need of relief. I, therefore, take it that at least 15,000 were in need of relief in the middle of April, and by the end of June nearly double that number might reasonably be expected to require relief. During the month of May the average number to whom relief of all kinds was given was about 10,000; during June about 17,000—the last week of June being about 19,000; and it was only towards the middle of July, with a sudden rush, as gratuitous relief was expanded, that the number reached 30,000. If, therefore, the number on relief at the beginning of April is considered anything like an approximation to the number in need of it, it is evident that in May and June relief was very inadequate, as instead of keeping pace with a rapidly deepening distress the relief actually diminished in May, and only again reached April's figures in June.

J. S. HEANEY,
Assistant Collector in charge Thásra Táluka.

Thásra, 11th January 1901.

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Mr. G. E. MARJORIBANKS.

Replies by Mr. G. E. Marjoribanks, Divisional Forest Officer, North Thána, to the questions drawn up by the Famine Commission.

Question 22.—Yes. Full details are in the Collector's office.

At *Pokharan Tank Relief Work* huts were erected for sheltering the people, made of bamboos, palm leaves and matting, each hut being generally capable of giving rough shelter to the members of one family. There were matting sheds for the hospitals and poor-house, separate sheds being kept for infectious cases. At *Gáyamuk Relief Camp* (Thána-Ghodbandar Road Work) the air being better, no huts were provided. Sheds as at Pokharan.

Males and females were kept apart in the hospitals.

Latrines were dug at convenient distances from the camps.

At Pokharan the Tánsa Lake pipe was tapped for water-supply. There were two wells at Gáyamukh—one good, one very inferior. The food supply was all arranged by a number of native gentlemen of Bombay (Ruttonsi Mulji, Virji Válji, and others) assisted by Banias in Thána. There were shops at both camps. All the "gratuitous" food was supplied free of charge by these gentlemen. Medical conveniences were supplied from the Civil Hospital, Thána, under the direction of the Civil Surgeon, who used to voluntarily supervise the hospital arrangements. In direct charge of the hospitals were a "Hospital Assistant" at Gáyamukh and "compounder" at Pokharan. As "Special Relief Officer" (though not according to the definitions of the Code) I was responsible for the control of the hospitals, poor-house, distribution of food, sanitation, selection of recipients of gratuitous relief, submission of weekly returns to the Collector, and despatch of the people to their homes.

11 (e).—The Government forests in this district were opened in October 1899.

25.—No. They were practically independent in all technical matters relating to the works, the Civil Officers and myself exercising merely a discretionary supervision. They were, however, subordinate to the Collector's orders.

26.—Yes. The Civil Officer at each camp was selected from the Collector's office and drew his usual clerical salary; but one Civil Officer (I believe) drew Rs. 10 extra allowance.

27.—No.

33.—Subsequent changes were in the direction of greater severity, led up to by the laziness of the workers. The fact was, most of the people on these works had previously been making lots of money by begging in Bombay (several were found to have Rs. 10, 12, or even more, on them) and did not see the fun of working hard all day in the sun for about annas 2, which was about what they usually could earn. This remark applies especially to Gujarátis and Káthiáwáris.

34.—(For *details* of the scale of wages, infliction of fines, etc., I must refer you to the reports from the Public Works officials sent to the Collector, as I cannot remember them accurately enough.)

The scale of wages, though I forget its details, was fully adequate, inclined to be *rather unduly liberal*: this I am absolutely certain of. The workers thrived and fattened on it and all could save if they wanted.

Reasons.—The people as a whole improved vastly in condition; nearly all used to indulge in luxuries, such as tobacco, and sweetmeats, and fruit; and I know from actual fact that only about half the money paid to workers and dependants at Gáyamukh returned to the Bania's shop.

35.—A rest-day wage was given on Sunday; but I forget the scale.

37.—The penal wage never became the wage generally earned in my experience.

38.—Payment was at first made daily; when the numbers increased it was made on alternate days, which gave rise to some discontent at first. I think payments should be made as often as practicable. If the people get a big sum at once they are likely to spend too much on luxuries and have too little left for the necessaries of life before the next payment.

39.—When fresh people arrived on the works they were fed gratuitously the first day. This is only practicable when you can get warning beforehand that they are coming: otherwise the kitchen arrangements are unduly upset; and it would not do in the case of very large arrivals. They were also paid for the day, they were fed if they worked, and then regularly like the old hands.

40.—To the individual. In my opinion it is much the better plan where the paying staff is adequate.

44.—Contractors were employed largely on famine grass operations by Mr. Fisher of the Forest Department on the B. B. & C. I. Railway Section. In his case it was the only method of controlling the labour properly.

48.—The Collector.

51.—No.

61.—For fodder works see "*67.*" Of forest works, I only know of such as were undertaken in North Thána Division. These were—

(*1*) *Demarcation and cutting of forest boundary lines*—

Average number of men employed daily	117		
Total expenditure	Rs.	2,444	8 0

(*2*) *Fire-protection* (fire watchers)—

Number	92		
Expenditure	Rs.	1,272	11 0

Fire-protection (extinguishing fires and burning fire traces)—

Average number	103		
Expenditure	Rs.	248	0 0

(*3*) *Purchasing head-loads of wood at*—

(*a*) Sanján—

Average number daily ...	20		
Expenditure ...	Rs.	331	0 0

(*b*) Malyán—

Average number daily	58		
Expenditure ...	Rs.	63	2 0

(*4*) *Deepening creek at Sáwte Bandar*—

Average daily muster	85		
Expenditure	Rs.	660	0 0

(Work not completed.)

66.—4,708 cattle were received in the Dahánu Táluka of North Thána from Gujarát, as there was abundance of grazing in the forests. The measure was not a success. The Gujarát cattle, accustomed to plains and easy places, could find no footing in the steep rocky Thána jungles and were killed and died in thousands. Very few ever returned.

67.—Yes. Grass pressing and despatching operations along the B. B. & C. I. Railway by Mr. Fisher, and along the G. I. P. Railway in two sections by Messrs. Edie and Fagan (Forest Department) were successfully undertaken. The grass from Mr. Edie's section (North Section, G. I. P. Railway) was despatched to the following districts in bales:—

Poona	5,569,495 lbs.
Násik	3,253,653 „
Nagar	925,492 „
Khándesh	1,111,205 „
Commissariat, Deoláli ...	114,787 „
Mounted Police, Nagar ...	79,886 „
Total... ...	11,054,518 lbs.

The cost of the grass loaded on waggons was Rs. 6-3-10 per 1,000 lbs.

This section alone gave employment to about 110,650 men, many of whom came down the Ghâts from the Násik District, etc. For details of the above, other grass operations of Thána, application may be made to the officers above-named.

68 (a).—In cash at *Gáyamukh* at the following rates:—

Males	As.	1½ per diem.
Females	„	1¼ „
Children over 8 ...	„	1 „
„ not „ ...	„	¾ „

with cooked food at Pokharan.

71.—By "poor-houses," so far as my two camps were concerned, was simply understood the place where dependants were fed or received cash. The numbers never exceeded about 750 for both camps together.

73.—Yes. Care was continually taken that none should stay in the poor-house who were fit to go on the works. From time to time batches of people from the poor-house were sent to their homes; but along with people from the works, not separately.

75.—Meals were given twice a day, at about 9 A.M. and 5 P.M.; the time did not vary.

The ration varied occasionally, but it generally consisted of dál and rice or *khichadi*, and 2—4 large chapátis per head per diem. People were not compelled to finish their food on the premises, but generally did. The food was always ample and nearly always excellently prepared.

77.—Restricted. Only such as could not work were given admission, *i. e.*, infirm of either sex, nursing mothers, and children under 8 or 9. The selection was made by the medical attendants in consultation with the Civil Officer and myself.

74.—The ration was varied in case of sickness or weakness, soup, sago and milk being largely used. Five seers of milk came in the morning, of which 4 went to the hospital and 1 for sago for invalids. Same again in the evening; and other 6 seers came in the afternoon for distribution among emaciated children. This milk was at first supplied partly from the Charitable Fund, subsequently entirely by Mr. Mulji

gratis. Small sums from the Charitable Fund were also expended at my discretion on ghee, tea and other comforts for old women and men.

89.—A great mixture of classes—Káthiáwáris, Gujarátis, Ahmedabadis, Ghátis, Várlis, Káthodis, Kulabis, Mahárs, etc.

94.—Weekly returns were sent to the Collector.

95.—Not at all, except where diarrhœa may have arisen from the people eating unripe and noxious fruits.

96.—To a very small extent. At Gáyamukh permanganate of potassium was used at irregular intervals. It was not really necessary.

97.—Latrines in sufficient numbers and at suitable distances were provided at the camps, hospitals and poor-house, and changed from time to time: not on the works.

The ground in the poor-house was kept clean with cowdung-wash. These arrangements were supervised by the Police, Civil officers and myself. The dispensaries and hospitals were kept scrupulously clean.

99.—The people (chiefly children) used to eat unripe mangoes and various berries in large quantities, and much diarrhœa was thereby caused. I tried to prevent this, but it was impossible to stop it entirely. The jungly people probably dug for roots.

100.—Roughly half the numbers on these two relief works were from Native States, chiefly from Káthiáwár. There were very few such on the other famine works mentioned under "*61*" and "*67.*"

102.—The orphans were sent to some orphanage, but I cannot recall the name of it. It can be got from the Collector's office.

104.—No.

105.—No.

108.—The provisions of the Famine Code were largely departed from, but as I have not the Code by me I cannot give details. These departures were chiefly in relation to the food supply and establishment, and in my opinion were fully justified, as these were never intended to be ordinary relief works, but were got up in the first instance by private charity, and hastily organised to relieve Bombay of an overwhelming crowd of beggars. So far as I know, the actual works were governed pretty strictly according to Famine Code rules.

112.—In my humble opinion, *No.* The morality, social concord and adhesion to family ties in these two camps was wonderful.

I regret that this letter is late.

G. E. MARJORIBANKS,
Divisional Forest Officer, North Thána, late Special Relief Officer, Pokharan Tank and Thána-Ghodbandar Road Relief Works.

Mr. R. E. HOLLAND, I.C.S.

Replies by Mr. R. E. Holland, I.C.S., to the questions drawn up by the Famine Commission.

Question 1 (a).—The harvest of 1897-98—

The whole of the sub-division suffered from deficient rainfall (*vide* the marginal table). Two days' unexpected rain in February improved the jowár crop and did not harm the cotton. The latter was excellent in Broach Táluka in lands bordering the railway line, but below average in other parts. Crop estimates were as follows:—

Broach	... 43·52
A'mod	... 24·67
Jambusar	... 27·4

	Broach.	A'mod.	Jambusar.
Cotton ...	10	12	8
Jowár ...	11	6.	4
Wheat ...	10	10	8
Paddy ...	8	6	12

Half the villages in Jambusar suffered from the ravages of locusts.

The cultivator's share of cotton profits was lessened by the establishment of the Broach Cotton Ginning Association by which owners combined to raise the ginning charge to Rs. 7 per *bhár* from Rs. 3 or 4.

A relief work was opened in Jambusar in May, but the absence of real distress is shown by the fact that work for Rs. 188 only was done out of a possible Rs. 930.

1 (b).—The harvest of 1898-99—

The rainfall was above the average in the sub-division (*vide* the marginal table). The crops were rather late owing to excessive early rain, but were otherwise good.

Broach	... 46·33
A'mod	... 48·53
Jambusar	... 49·62

Necessary leniency was shown by an order that notices for the recovery of land revenue should not be issued till one month after the usual time. But the cultivators' profits were seriously affected by dislocation of trade, which was due to plague, and by the increased charges for ginning cotton.

1 (c).—Outlook of the district when the rains of 1899 commenced—

The public health during 1898-99 was uniformly bad and this fact was attributed to the excessive rainfall of the previous monsoon.

Generally speaking, however, the year was not a bad one. There was nothing approaching distress anywhere, and the cultivator did not enter on the struggle against famine handicapped by previous losses.

If the monsoon, which burst at Broach in a thorough and decided manner on June 15th, had only continued in the same manner, there could have been nothing to complain of at all.

2.—The following figures show the total normal cultivated area of the three tálukas. It is not possible to say how much is kharif and how much rabi.

The area actually cultivated in 1898-99 is also given. It is about one-sixth of the normal total area. The figures for the latter were procured from village and táluka records.

Area of land held by occupation.

	Wet.	Dry.
Broach	8,769	118,780
A'mod	73,742·18	1,263·27
Jambusar...	1,534·22	159,823·31

Area of land cultivated in 1898-99.

	Wet.	Dry.
Broach	3,830	32,530
A'mod		10,078·12
Jambusar...	1,534·22	8,239·3

3.—(*a*) The average rainfall for the three tálukas during the rainy season is as follows :—

	Inches.	Cents.
Broach	50	79
A'mod	40	8
Jambusar	40	60

(*b*) The actual fall in 1899 was—

	Inches.	Cents.
Broach...	9	60
A'mod	4	50
Jambusar	7	47

or about one-sixth of the average.

(*c*) Rain began on June 15th and continued till the end of the month. A break then occurred which lasted till September 9th, when a thunderstorm gave ¼ inch of rain at A'mod and 1 inch at Jambusar, but none in Broach. But the ground was by this time so hard that it did little good. No more rain fell.

(*d*) The actual fall therefore, as given above, began and ended between June and September. The average for four months is as follows :—

	June.				July.				August.				September.			
	Actual rainfall in 1899.		Average.		Rainfall in 1899.		Average.		Actual rainfall in 1899.		Average.		Rainfall in 1899.		Average.	
	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.
Broach	8	22	6	96	0	29	19	47	0	79	7	57	0	44	9	87
A'mod	2	61	5	83	1	02	17	65	...	...	9	53	0	87	10	0[illegible]
Jambusar ...	5	89	5	41	...	...	17	61	0	03	8	94	1	47	8	6[illegible]

4.—It is impossible now to answer this question in precise figures from the records available; but there was practically no crop at all in the charge except a wretched two or three-anna crop of cotton in a few fields of A'mod and Broach which had lain fallow the year before.

The irrigated crops were infinitesimal.

The following anna valuation is given for what it is worth :—

	Jowár.	Bájri.	Wheat.	Tur.	Sesamum.	Cotton.	Paddy
Broach ...	4	4	4	1	2	8	...
A'mod ...	...	2	2	2	1	2	...
Jambusar ...	...	...	...	...	...	...	...

5.—It is impossible to say until the new Census is completed.

6.—Necessity of relief was anticipated from failure of crop and from observance of the condition of people. Test works were established which automatically proved necessity.

7.—The absence of field work owing to the drought, the evident scarcity in villages, the numerous applications for work, the fact that in August in Jambusar Táluka large numbers of Government babul trees were being cut by villagers until stopped by severe orders.

8.—First, Local Fund test works paid for out of Táluka Local Board Funds. They were twenty-eight in number.

A constant watch was kept on the attendance at these works and on the directions from which the stream of labourers came.

9.—The scheme of relief works prepared previous to famine was inadequate as Broach had always been considered immune from famine.

Plans and estimates for the Asarsa reclamation work in Jambusar Táluka were ready.

10.—Answered by district relief programme in Collector's office.

11.—(*a*) Local Fund test works were opened on the 1st September 1899 and were continued till about October 7th. Twenty-eight works in all were opened between these dates in the tálukas of A'mod, Jambusar and Broach.

(*b*) Poor-houses were opened at Broach on 2nd December 1899, at A'mod on 15th December 1899, at Jambusar on 11th December 1899.

The first was closed at the end of December 1900, and the other two at the end of November 1900.

(*c*) Kitchens on most of the relief works were started about 11th December 1899, and, after the kitchens were regularly opened, on all big relief works.

(*c*) (ii) Village kitchens were opened after the commencement of the rains. They are described elsewhere.

(*d*) A fund was started by Mr. Cadell, formerly Collector of Broach, for a cheap grain shop in the Broach City by local collections. Another fund was worked by a committee of ladies of the Broach City under the President, Mrs. Pánse, wife of the present Collector of Broach, for relieving the destitute females of the district. Cheap grain shops were also opened in the towns of A'mod and Jambusar by the local Mahájans. Allotments were also received from Mrs. Lely's fund.

(*e*) There are no forests in the Broach District.

13.—Yes, for wells only, both temporary and permanent.

They were recoverable in full as usual under the Improvement Act, but nothing has yet been recovered.

14.—Irrigation works can only be made in few places in the charge with any success. They are generally useless on black soil which absorbs water before it can distribute itself. They are effective in the light soil which forms one-third of Jambusar in the north-east and in the alluvial soil along the Narbada, but the latter lands are generally leased yearly by auction.

The value of the wells dug during the famine was small from any one of the points of view mentioned in the question.

But it must be remembered that until this year takávi under the Land Improvement Act was practically never applied for in these tálukas.

15.—There were test works under the Local Boards whose funds were later supplemented by a grant from the District Local Boards.

The works were conducted under the supervision of the Civil authorities and were inspected by the Local Fund overseers.

16.—The task on test-works was 1,000 cubic feet of earthwork for each gang consisting of 10 men, 10 women and 10 children (as far as practicable). No difference in task was made on account of the sex of the workers. Gangs were grouped according to caste and orders were issued that if the task appeared too hard for any particular caste gang, suitable reduction in it should be made.

As a rule the men were diggers and women and children carriers.

17.—Payment was supposed to be in strict proportion to results. A maximum was fixed and full task was done. There was no minimum as it was unnecessary.

There was no rest-day allowance. The pay was 2 annas a male, 1½ annas for a female and 1 anna for a child.

18.—The increase in attendance at the small works and the continued failure of the rains.

19.—Some small Local Fund test-works, such as channels, had already during September been in charge of the Public Works Department on the ground that professional knowledge was necessary for computing levels, &c.

When it was decided to open regular relief works, they were large public works and not small village works.

20.—Under the control of the Public Works Department.

The Assistant Collector wrote on September 30th and said that on the opening of big works he anticipated there would be a considerable increase in the number attending and gave as one reason the fact that on small works, under Public Works Department management, applicants had been turned away for want of tools.

21.—This question will doubtless be fully answered by the Public Works Department authorities.

The maximum was exceeded in many cases and the Collector issued an order on November 22nd that when this happened the admission of new-comers should be stopped and they should be directed to go to new works.

22.—This question will be answered by Public Works Department authorities.

23.—Admission to the works was at first free.

Early in December orders were issued to the effect that admission should ordinarily only be on production by applicant of a chit signed by village officers.

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This did not work well as starving people had to be admitted in any case.

The distance test also, where tried, was ineffective. Later, compulsory residence was enforced. Night *hajris* were instituted, and workers found absent twice were drafted to a distant work.

24.—This question will be answered by the Public Works Department authorities.

26.—There was a Civil Officer for each work. He was at first selected from the permanent staff of the Revenue establishment and paid Rs. 40 per month. Afterwards graduates were appointed, who were paid Rs. 60 a month and later Rs. 80.

The Civil Officers cannot be said to have had the power mentioned in the latter half of the question.

27.—The final word rested with the Public Works Department authorities.

28.—The gangs consisted of 50 men and women. They were divided into diggers and carriers. Arrangements were made to secure village and family gangs. No difficulty was found as a rule with respect to this, and in fact workers from the same family or village clung together so much that it was difficult to induce the weakly ones to join the special "emaciated gangs."

29.—As far as can be ascertained from the records the workers were classed according to Section 109 of the Code, the majority being in Classes I and II as diggers and carriers, respectively.

In the early part of February there was a quarter of the population of Broach on work and Government reduced the wages under Section 118 to—

	A.	P.
Class I...	1	8
Class II...	1	3
Minimum or penal...	0	9
Children...	0	9

This arrangement remained in force till the end of April.

Mr. Painter, then Assistant Collector, protested vigorously that the wage was inadequate on the following grounds :—

(1) *Dora work*—March 30th.

Under the fining system whole gangs were getting pay at a rate averaging less than one anna a day for adults.

(2) *Wantarsa*—March 31st.

Fines for works between 75 per cent. and 100 per cent. of task reduced wage to anna 1.

Prices for work between 75 per cent. and 50 per cent. of task reduced wage to nine pies a day. 1,100 people out of 3,500 on the work got only this latter wage.

(3) Signs of physical deterioration were abundant.

(4) The proposed scheme to draft workers who could not earn enough to higher paid works south of the Narbada fell through, partly owing to inadequate arrangements, partly owing to the intense dislike of the workers to the scheme.

The Code wage was restored on April 27th.

30.—None appeared necessary, as men naturally came into the digger class and women and children into the carrier class.

31.—The Code task system was in force on the majority of works. The piece-work system was in force on Asarsa Tank and was found troublesome to work.

33.—The full Code task was exacted at first. No allowance was made for the distance people had come, except that they were not fined for the first ten days after arrival. Subsequent changes in the task (except when Government lowered the wage) were in the direction of leniency until the famine was nearly over. At the beginning of September orders were issued to exact the full Code task.

Details as to variation in the task will be given by the Public Works Department authorities.

34.—With the exception of the period when wages were reduced by Government the wages on the Code scale were ordinarily neither inadequate nor unduly liberal, considering the systematic modifications in task.

35.—A rest-day wage was given. It was not possible for workers under the Code system to earn enough to support themselves on the rest-day.

38 and 39.—Payment was made daily for the first three days, then weekly. More frequent payment is desirable, but the process is lengthy and a larger staff would be needed than can ordinarily be got together.

40.—In theory, payment was made to the individual, and that is no doubt the best way, as the gang kárkun or mukádum can otherwise deceive subordinates as to the amount due to them.

46.—By order of the Commissioner, dated December 1st, 1899, wages were adjusted from time to time by the officer in charge of the work with reference to the prices of staple food grains in the

bazar to which the relief workers resorted. Special Civil Officers on works were ordered to fix a maximum price for grain in the shops on the works, allowing for cartage from the bazar shops.

Jowári was generally the wage basis. Rice was taken as the basis on some works previous to Collector's order.

The bazar price of jowári was certified by the Mámlatdár.

49.—No such arrangements were made, but the endeavour was made to induce people to return to their homes after the burst of the monsoon by increasing the task on the big works and by informing the labourers of the opening of small works at or near their villages. This was ultimately successful.

50.—Small village works were opened in the latter half of June, when it was anticipated that the monsoon would cause the workers to migrate from the big works to their villages for commencement of cultivation.

In Broach Táluka between the 11th June and 6th November 1900 work was done in 26 villages in all.

In Broach Táluka, of which I was in charge, the objects kept in view were—

(1) To decentralise the relief system so as to get the people back to their villages.

(2) To keep down the free dole list by providing work for all able-bodied persons who were not engaged in cultivating their own lands.

Information was spread on the big relief works of the commencement of village works, and a watch was kept on the dole lists of villages so that a small work might be started wherever the dole list appeared abnormally swollen.

51.—Village roads were improved, village tanks were dug and bunds made up to prevent low-lying grounds being flooded.

52.—The works were under the direct supervision and management of the Civil agency. A kárkun on 12 or 15 rupees was sent to each small work to keep the muster and see that the work was done. The work was laid out and measured by the Local Fund overseer and the works were constantly inspected by Circle Inspectors, disbursing officers, the Mámlatdár and the sub-divisional officers.

The patels in the villages were made personally responsible for the works.

55 and 56.—No attempt was made to work the Code task system as the staff was insufficient. The wages were the Code minimum.

Employment was open to all who needed it, not being independent cultivators who got dole.

It is clear that the system was not abused as the number attending any one work was never excessive in proportion to the population of the village or villages it served.

As the work was connected with the social life of the v llagers, sel.-respect and public opinion operated largely to restrain those who did not need work from seeking it.

57.—As the large works everywhere shrank, the dole lists and attendance at village works increased.

58.—I am in favour of the extension of the small work system for the following reasons :—

(1) They are cheap.

The large Public Works Department establishments are avoided, and the friction caused by dual control is therefore absent.

(2) The work done is profitable and useful, as every village needs tank repairs or extension, and katcha road or channel-making is always to be done.

Though a rigid task might not be exacted, the revenue control with an enlarged staff is able to see that payments are not fraudulently made and that people do not come on the work who do not need help.

This is proved by the fact that the Revenue authorities have been able to successfully control the dole lists.

In Broach it is not possible to say that most of the money spent on large works is a good investment for the people.

The Local Fund overseer system slightly enlarged is able to supply all the professional knowledge necessary.

Public opinion operates in the village to keep people who do not need work from seeking it. It is ineffective on a large work away from the village.

A good patel will always see that money spent in his village is spent to the best advantage and the villagers will work with enthusiasm at a task of which they and their children will reap the benefits.

3. The pauperization and demoralisation, which necessarily follow when people are summoned from their homes to herd in crowds on distant works, would be avoided.

The country would not be flooded with poverty-stricken wanderers and there would be no disastrous interruption of home life.

As a consequence no medical establishment (except itinerant Hospital Assistants), no poor-houses or dependants' kitchens would be necessary.

4. People understand control by the Revenue authorities. The altered conditions when they come under the control of the Public Works Department authorities on a big work add to their difficulties in a time of famine.

65.—A cattle camp was started at Broach where poor cultivators were invited to send their animals until the rains began. Fodder was supplied at the camp and the animals were looked after. The management was in the hands of the Personal Assistant and the Huzur Deputy Collector. A Veterinary doctor was also kept at the camp. The scheme proved most successful, as many cattle were saved and returned to their owners.

Many animals were sent to the grazing grounds of the Thána forests under the supervision of Messrs. Wood and Monteath, and the Railway freightage which came to about Rs. 2-12-0 a head was either paid by the owners or lent to them as takávi. This scheme cannot be said to have been successful as 60 per cent. of the exported cattle died under the altered conditions of climate and food.

The cultivators who required their cattle for actual work, whether for cartage or for raising crops by irrigation, were given grass at cheap rates and in many cases grass was issued to them in lieu of takávi.

In April, when the cattle from the cattle camp and from the Thána forests were to be returned to their owners, a cheap fodder scheme was introduced by the Commissioner, N. D., and grass was sold to poor agriculturists at Rs. 2 per 1,000 lbs.

66.—When the fodder question first arose in the month of September, Mr. Cadell, the Collector of Broach, arranged with the Collector of Khándesh and reserved part of the Nawápura forest for the Broach District. Grass-cutting operations were carried on there and nearly 50 lakhs lbs. of hay were brought to Broach at the expense of the District Local Board and sold to poor cultivators at cheap rates.

67.—(*a*) Dependants on large public works were relieved generally by cooked food. When for accidental causes, such as the destruction of the kitchen by monsoon, this could not be done, uncooked grain was given.

(*b*) On small village works dependants were relieved with uncooked grain.

68.—*Distribution of uncooked grain as dole.*—

Caste distinctions made kitchens unpopular in villages. It was also difficult—

(1) to get a suitable place to hold the kitchen ;

(2) to collect enough pots and pans for it ;

(3) to get the people to come at the time when the food was cooked, namely, 10 A.M., as this was the time that they would naturally be in the fields.

69.—The lists of persons in receipt of dole were drawn up by the village officers, subject to constant and careful revision by the Mámlatdárs, disbursing officers and Circle Inspectors. The sub-divisional officer and the medical officer, when on tour, also constantly modified the dole list.

No classes of persons were specially excluded from dole and the only real test was evidence of starvation, such as empty grain receptacles, evident inanition, &c.

70.—Three poor-houses were opened in Broach, A'mod and Jambusar, respectively, on December 2nd, December 15th and December 11th.

71 and 72.—A large number of vagrants and immigrants were collected in the streets by the constables and doolie-bearers sent out to look for starving people.

Vagrants were kept in the poor-house till strong enough to work. Immigrants were at first similarly sent to the work, but later were drafted to Native States to which they belonged.

73.—It does not appear that any village kitchens were opened before the rains broke.

Twenty-six kitchens were opened in the charge after the rains broke. Both recipients in villages within the radius of three miles of a relief work kitchen were made to attend such kitchens.

A three-mile radius was the maximum limit which a kitchen could be expected to serve.

74.—The ration provided was jowár-flour, rice and dall.

Meals were distributed twice a day at about 10 A.M. and 5 or 6 P.M. The meal was supposed to be consumed on the spot.

77.—The poor-house ration was ordinarily rice and dall. In hospital the diet was modified according to the orders of the doctor. Children were given milk frequently.

78.—Lists were drawn up by village committees appointed for the purpose, and these lists were revised by the Circle Inspectors, disbursing officers and Mámlatdárs. Every village was inspected at least once a week by the Circle Inspectors and by other officers in the course of their tours.

79.—Payment was made daily in grain at the village chavra.

94.—Private credit undoubtedly contracted in September when advances were needed for rabi. Money-lenders feared to lend as so much Government takávi was already sunk on the security of land.

97.—Apart from the the ordinary systems of village registration of births and deaths, orders were issued early in April that Special Civil Officers on relief works should keep birth and death registers in the standard form.

Such births and deaths as were registered on works did not of course appear in village registers as well. Weekly statements were sent by the Special Civil Officers for incorporation in the Mámlatdár's returns.

102.—The people supplemented their food largely with grass seeds called "sama" and "anchimanchi." Mixed with ordinary food grains they were not unhealthy, but eaten alone they were said to be unhealthy.

105.—I consider that as the fund was administered in this district, the classification of the objects of the fund given in paragraph 527 of the report of 1898 was satisfactory.

108.—The only complaints heard were about the beginning of the weeding time, when the wages given on relief works and the dole given in villages kept labour from the fields.

The difficulty was met by enhancement of the task on relief works and rigid scrutiny of the dole lists.

R. E. HOLLAND.

17th January 1901.

Mr. R. E. HOLLAND, I.C.S.

Supplementary answers by Mr. R. E. Holland, I.C.S., to the questions of the Famine Commission.

Question 28.—Generally the workers came in gangs varying in number from 40 to 60. They had a mukádam from their own village, or an adventurous Bohra was always on the way to collect such workers when they were coming to the work and to advance them grains from a shop on the work. Mukádamage had become a regular trade. The chief function of a mukádam was to advance grains. A Bohra mukádam had always a brother or a relative as a shop-keeper. Grains were advanced from these shops and full advantage was taken of the ignorance of the people to cheat them. Further, the women and children of a mukádam would always be idling away their time and their tasks were performed by the other members of the gangs. The persons found guilty were punished, but the evil was too rampant. The mukádam was useful in his way to the gangmen, but the price charged was simply ruinous. Instances are found where mukádams have returned with sums varying from Rs. 20 to 100. Some better plan would be welcome.

46.—Prices were based on the staple food grains of the district. Here the staple food was bájri and jowár. Jowár was cheaper and the wages were based on it. It would be better if the wages were based on the flour and not on the grain. The flour is dearer by 2 lbs. per rupee and this makes often a difference of 10 to 12 per cent. in the wages. Code states that the Collector should provide grinding stones. But it is impracticable to do so. On a work like Broach Reservior variation of a pound was not neglected. The fractions of a pound were omitted.

Large Works and Small Works.

58.—The order should be, in the beginning small works, subsequently drafting to large works with tickets, and then back to small works at the time of the advent of the rains and during the rains. On large works camps are required to be provided. These cost more than the advantage gained. The present famine huts do not afford much shelter against the inclemency of the weather. On the Broach Reservoir more than 6,000 huts were put up; but hardly half the number was occupied. People like to live as they choose. They do not desire to be restricted. More than Rs. 40,000 were spent on hutting and hardly half the number was occupied. Each hut was supposed to hold 5 persons. If there were five persons of the same family, then they would occupy one hut. But 5 of different families would never consent to live in the hut. Furthermore, one married pair and their children could stay in one hut, but never two married couples. If they were to stay in the camps where ten huts were assigned to each gang of fifty persons and their non-working children, it was found that only half the number could be fairly accommodated. The remaining had to live outside which they never liked. So the workers preferred to live far away from each other and the camps became unpopular. Further, when workers came to the work, they kept their kit in the camp and their children or dependants used to guard it. But all were not blessed with children and many of those who had chose to send them to kitchen or brought them to the work to look after the infants. Thus a large number had to remove daily their kit from the hut to the work and from the work to the hut. Instead of doing this they preferred to stay where they worked. Further, in cold weather lying in pits gave them

better shelter against the morning chilling breeze than what the north side open huts afforded. This item of expenditure will be dispensed with in the case of village works.

Further, the water-supply and conservancy arrangements become a special feature of large works. Not less than Rs. 50,000 were spent on these on Broach Reservoir. These will be less costly on small works. Epidemics as cholera and small-pox as a rule do break out in famine camps and prey more heavily on large camps than they would on small village works.

On large works people come from distant parts and consequently find a great difficulty in securing credit and are forced in the clutches of the enterprising mukádam. This state of things would be avoided on small works where people have less difficulty in securing credit in their own villages. The tyranny of the mukádams of the present system will be greatly done away with on small village works.

Corruption is a special feature of large works and is found to be proportionately greater with a larger work. The mustering kárkuns of the Public Works Department are men of very low morals and principles. The mukádams are adventurers and come with a special purpose of cheating the ignorant. The supervision required over these is very strict. With a number of 120 kárkuns and 440 mukádams the task of checking work will never be even up to the standard. Workers are admitted without the knowledge of the superiors. Men are mustered twice. Frauds are practised in payments, and various other items of corruption come into play. The record of persons seeking relief as regards their villages, whether British or Native, as regards their condition, &c., is never trustworthy. The various tests, such as distance test, compulsory residence and drafting, lose their propriety. Several of the above corruptions can be easily avoided on village works, where the patels and talátis know the people and where there are all kinds of facilities to verify the statements of the workers. On the village works alone it is possible to know whether the persons really in need have to come to the work or no. The knowledge of local circumstances will be a great aid. Very many workers stayed at home till too late. Relief ought to have reached them earlier. Such persons came to big works in a reduced condition. The mortality was increased owing to such cases. The tasks done by them were nominal. The expenditure involved by the opening of such village works would be compensated by less money paid in daily wages with nominal return, by the less mortality from the cause shown above, and less money spent on such persons coming in the last stage. On Asha Tank for some days the number received daily was 2,000. Payment of daily wages, issue of tools, appointment of kárkuns and other preliminary steps for such a large number took nearly two days before the people were put on regular task. The wages thus spent were a burden. Further, for whatever task done for the first two weeks the men were not fined. This was resorted to owing to the bad state of several workers. Thus full wages were paid for nominal work. By the opening of the village works people could come in a better condition and a great saving would be effected by insisting on giving full task. When the production of tickets is enforced and all facilities given to the workers to produce them, there will be no risk in sending the British subjects back to produce such tickets. The absence of the tickets would at once point out who come from the Native States. Such people are to be admitted and their presence must be detected as early as possible. In my opinion a work with more than 5,000 workers at the most is beyond the strictest supervision of an able officer if he is to minimise or almost to root out all the above-mentioned evils. When the number goes beyond that, these evils will come in numbers and unless they are nipped in the bud or special precautions taken to guard against them at the outset the

work of an officer is sure to be a failure. Small works alone ought not to be the only weapon against famine. Otherwise several of our irrigation works, embankments of roads, water-supply, tanks and Railway embankments—all of highest public utility—would never have come into existence. When such works are to be taken up, they must be divided into sections. Each section should not be made to employ more than 5,000 people and such sections should not be nearer than 3 to 4 miles. Workers for these should be carefully drafted from small village works, so that all the further tests of compulsory residence and drafting may be avoided, and the result of this will be better work for the money spent.

98.—A very large mortality was due to diarrhœa on the works and in the villages. The wages were based on jowár, but rice being cheaper it was very largely used, the rice used being not of country production but Rangoon rice. In the process of cleaning the husked rice lime on a large scale is used. Further, the people were never accustomed to eating this kind. I have made close inquiries and found that the persons using this rice suffered a good deal from diarrhœa. The people complained of it. Similarly other grains of local production were not available in sufficient quantities and were also dearer. The foreign grains were of inferior stuff and the cheaper of them were of far inferior quality. Only the poorest people use *láng* pulse; but *tur* pulse being very dear, *táng* being cheap was very largely used. This stuff is very difficult to digest and requires a good amount of heat to cook. Fuel being scarce and costly this *dál* oftentimes remained uncooked and its taking in brought diarrhœa. Similarly jowár flour was largely used. Grain could be had less adulterated, but grinding was not possible. So flour was used. This was a poorer stuff. Husk of wheat and other grains was even mixed. The use of this was also responsible for sickness in the camp, especially in the cases of those whose constitutions were run down by long strain of unusually hard labour on the relief works.

101.—There was a regular inspection of the grain shops on the Broach Reservoir and the inspection did oftentimes disclose the sale of inferior and unwholesome grain. Owing to cheapness there was a tendency among the workers to buy articles of inferior quality. The shop-keepers on the works were prevented from keeping inferior or unwholesome foods in their shops. But the city being very close the workers bought cheap grains in Broach and the Special Civil Officer had no control over this state of things. The jowár and bájri flours were more unwholesome than the grains sold, the reasons being that the adulteration would be more easily detected in grains than in flours. In the closing months of famine, *i. e.*, June and July, when grains were dearest, the adulteration was greatest and the jowár flour sold in some of the Broach shops was nothing else than a mass of indigestible chaff. The Bhils were found to be fond of *dálias*, *kopra*, etc. During the noon recess several workers did not cook ordinary diet but had recourse to the above stuffs. In the evening only they prepared their *khichadi* and bread. Owing to their being required to work in the hot sun they swallowed a good deal of water. This caused diarrhœa or dysentery in no few cases.

Similarly some pulses such as *láng* required a good long time for cooking perfectly and consequently more fuel was required, but there was a dearth of fuel. Hence these pulses oftentimes remained raw and consumption of them caused indigestion and subsequently diarrhœa.

The sale of all such articles was stopped on the work but the workers brought them in Broach bazár and the Special Civil Officer had no control in this matter.

103.—There was a good deal of immigration from the Native States. On Asha Tank, a villagewár statement was

prepared as per Collector's orders. Out of 3,500 workers received in one week in January there were no less than 1,900 from the Rewa Kántha Agency States. Of course even in ordinary times several hundreds do come to Broach for a few months when the trade is brisk, but during the famine the immigration was very great. When inquiries were commenced to ascertain how many workers belonged to the Native States, the workers took a kind of panic thinking that they would be driven away. The result was that the workers changed the names of their villages wholesale. They always gave the names of the British villages on the borders of the State from which they came. The villages of Nikora, Janor, Nand, and all the villages of the northern Bank of the Narbada were given as the villages from which the Nándod people came. After a villagewár statement was prepared it was found that the numbers relieved for these villages were greater than the population of several of them. Thus nearly 5,000 workers were from Janor according to the villagewár statement; but Janor has hardly 3,000 souls in all. I don't feel the least hesitation to say that the percentage of the Native State people was 20 per cent. on Asha Tank, 35 to 40 per cent. on Broach Reservoir and more than 60 per cent. on Wánsi Channel in December last.

When Dr. Clarkson, the Sanitary Commissioner, made inquiries in the hospital on the Broach Reservoir, he found that out of the 25 patients of whom he made inquiries 20 of them were found to have come from the Native States.

On the Ankleswar and the Shukaltirth works, I am told by the officers in charge, that the percentage of Native State people was between 40 to 50 per cent.

104.—The mortality among these was very high. The generality of them being Bhils, they were most reckless. It was very difficult to induce them to resort to hospital and to kitchen. The majority of the hospital patients was from among these, but they were picked up in their last stage and brought to the hospital. Further, when they first came to work they came in a far worse condition than those from the British territory. In fact, those who came in a bad condition to the relief work were mostly from the Native States.

Doolis were kept moving about the work and the persons picked up were none but these people. If they formed 35 to 40 per cent. of the number of workers on Broach Reservoir, they were responsible for 50 to 60 per cent. of the deaths on the same work. The emaciated gangs were mostly composed of these. It was these people who always found difficulty in getting credit, and grain chits had to be issued in their favour on a large scale. They would always spend a portion of their weekly wages immediately in buying dates, sweetmeats, etc., and leave the Bania in arrears.

108.—Complaints were heard from big land-holders that they experienced a great difficulty in getting sufficient number of labourers for weeding. The reason was that on relief works the wages were low, but they got employment for the whole week; while they would get private work only for 3 or 4 days a week generally. The result was that the wages earned in both cases was almost the same. But private supervision being very strict and the work exacted being far greater, the workers chose to remain on the relief work. Such was also the case with the workers engaged on small village works. Weeding would not progress in rainy days, but on the relief work for rainy days they were paid minimum wages. This was a decided advantage in favour of choosing a relief work.

114 (a).—The payment by results system was introduced only after the rains. Its introduction did reduce the number but to an inappreciable extent on the Broach work. The

reason was that the staple food being dearer, the wages were based on the rate of 16 lbs. per rupee. The first class would get 10 pice for full task. The gangs did finish 60 to 80 per cent. of the task and earned proportionately, *i. e.*, 6 to 8 pice per day.

(2) The change had no effect on the death-rate. The death registers do not disclose any.

(*b*) The tasks were increased by 20 per cent. in the month of June. The increase did not reduce the number of workers, but the wages earned were decreased. The result was that the workers were obliged to buy inferior grains and with it sickness came in, and mortality did increase from the last week of June.

(*d*) The new rules of fining introduced in April did not reduce the number of workers but it had another effect. According to these rules a man doing any task between 75 to 99 per cent. was fined the same amount, persons doing cent per cent task got full wages, while persons doing 99 or 75 per cent. earned the same. The result was that the workers did work at night to finish the whole task. If they did not do this, then they tried to finish only 75 per cent. and not as much as they could finish. The original orders basing the fines on grades of work done with a difference of 5 per cent. worked well. Persons doing 95 to 99 per cent. task earned the same, doing 90 to 94 earned also the same, and so on. The idlers took some advantage of the guarantee of the minimum wages; whether 5 per cent. was finished or 50 per cent. task was finished they earned minimum wages, so they always tried to do less. Such persons were fined below minimum, but then their condition would deteriorate and full minimum wages had to be allowed again. These workers fully understood that the Government will not allow them to starve and they took full advantage of it by doing nominal task and earning minimum wages. They were quite satisfied with it. This class arose out of special circumstances. When the wages were reduced in March weak persons were weeded out from the gangs and formed into separate gangs, so that the stronger may not suffer for the weaker. Special rules were framed for these. If they did 50 per cent. of the task they were paid full wages, but they could not do even that much and were paid minimum wages. The minimum wages were 3 pice then. They were given an option to have either wages or feeding in the kitchen. But they chose the former. Their condition deteriorated and when their wages were raised they got 6 pice per day. Afterwards their condition was improved, but they had turned out idlers. They were weeded from the weak gangs and put in strong ones. But complaints were received and they were driven away from the strong gangs. So they were put in separate gangs and fined below minimum. This did not induce them to do better. They tried another kind of trick. They came as new comers and were oftentimes difficult to detect. As new comers for a few days they escaped fining and got daily wages or green chits. In order to avoid this kind of cheating they were allowed minimum wage and special mukádams were appointed to exact as much task as possible from them by not allowing them to idle away their time. The number of such people was small—about 500 nearly. During the period of heavy fines even persons from strong gangs were found leaving the gangs and coming as new comers in order to escape fining. But the number of these was small. Hundreds were enlisted on the new comers' lists, but the total number did not proportionately rise. This leads us to detect the above.

These evils cropped out of the different modes of fining. The modes of calculating fines had no direct effect in reducing the numbers nor any effect on the mortality, but they had an effect in the direction of demoralization or deterioration.

(*e*) The lists of necessity did act as a check on persons seeking relief reduced in the numbers on the work. The remedy of compulsory residence was very difficult to be enforced. Night házri was taken. But the people went to their homes after night házri. In very many cases when the roll-call was taken the names of the absentees were answered by others and it was extremely difficult to detect such frauds. Further, more than 10,000 people in the beginning and 5,000 people after April had come from long distances and were staying in the city. A house was hired by a whole gang and the monthly rent hardly came to 2 annas per head. They stayed in the city to avoid the inclemency of the cold weather. Compulsory residence on these was a hardship as these withstood all other tests. A cordon was kept round the whole camp and thus people were prevented from leaving the camp without special passes. This was done in May. After a week 3,000 persons returned their tools and left the work. This was an effective measure. Night házri was not so But it had to be given up on account of practical difficulties.

As regards drafting to distant works, it involved a great hardship on the workers. This method, no doubt, reduced the number on the works, but those who submitted were put to great hardship. The first and foremost difficulty was credit to secure grains in advance. This was the chief cause why very few persons willingly resorted to the Ankleswar works, although wages were higher on those works than on Broach works. This was the main cause why persons sent to Wánsi came back to Broach Reservoir. In a city like Broach one can find many adventurous Banias willing to advance from whatever place the workers may have come. But the same willingness was not displayed by the Banias and shop-keepers in the district.

As a rule, when the workers were drafted, they took the wages, did not clear the accounts with Banias, but left the work with the wages. This state of things made the shop-keepers reticent and credit was contracted. The result was that the Special Civil Officer had to issue grain chits at the close on a very extensive scale. Grain chits were issued in favour of no less than a thousand workers a day in the months of June and July.

Mr. A. R. BONUS, I.C.S.

Replies by Mr. A. R. Bonus, I.C.S., Collector of Belgaum, to the questions drawn up by the Famine Commission.

The following notes are prepared in reply to the questions put by the Famine Commission. It is not possible for me to answer all those questions in detail, or even at all, without reference to the records of the Collector of Khándesh, and these are not accessible to me.

Question 1.—I was not in Khándesh during the harvest of 1897-98. The crops of 1898-99 were good and the outlook at the beginning of the 1899 rains was favourable.

6.—Both. By September it was absolutely certain that unless the late rains proved exceptionally favourable there would be severe famine, but the first works opened were nevertheless test works and not regular relief works.

7.—Khándesh was face to face with the worst famine that had occurred for three hundred years. The rains had practically ceased at the end of June; the kharif crops had all withered and the rabi crops were never sown. The labouring classes could get no employment and clamoured for work. There was a considerable increase in offences against property, and it was noticeable that grain was always looted in such cases, money and other property being sometimes left untouched.

8.—Metal-breaking and tank-digging work. The test was the imposition of the usual test conditions under the Code of this province; payment by results; no Sunday wages; no allowances for adult or juvenile dependants.

9.—The preparations for the famine that occurred were inadequate. The estimate (annual) of the numbers likely to require relief in case of serious famine had been prepared during my absence on leave, and it bore no sort of relation to the actual necessities of the case, being based on the figures of 1896-97, when the famine in Khándesh was not particularly acute. On the other hand, if in the hot weather of 1899 the Collector had sent in an estimate approximating to the actual figures of the famine that developed a few months later, he would probably have incurred severe criticism.

(*a*) There was a list of sorts ready; but, like the estimate of numbers, it proved of little use. There were not enough works in it; they were not evenly distributed over the country, and the remarks column of the list was full of notes such as "no plans and estimates," "rough estimate only," etc. I am not able to say who is responsible for these projects being pigeon-holed, but I may remark that there is not (as in my opinion there should be) a special agency for discovering projects suitable for relief works and for making out *and completing* the necessary plans and estimates. To explain my point of view Khándesh is in certain parts very badly off for roads. But these roads would be Local Fund works, so the Provincial Government does not make out the plans and estimates; neither does the Local Board, as it is never in the least likely to have the money to carry the projects out.

(*b*) No, to both questions.

10.—Large public works. No.

11.—Writing from memory, I think it was in August that I began to allow the forests to be opened to grazing, including the collecting of edible leaves for the cattle. The idea of this was to keep the cattle in condition for agricultural operations if sufficient rain should fall. Next came the organization of private charity in Dhulia (the raising a fund to provide the poor with cheap grain) and the opening of test works. As the latter were gradually converted into relief works and other relief works were opened, kitchens on such works were opened too. I think a poor-house had been opened at Nandurbár by the time I left the district, but no kitchens other than those on works had been started.

14.—There are any number of fine old irrigation wells about East Khándesh, but they have been long disused. The reason for this is, I believe, the craze for growing cotton, a dry crop.

18.—The fact that the non-working dependants were in great distress. I do not say that the workers *could* not earn enough to maintain their dependants, but they certainly *did* not.

19.—Large public works.

20.—(*a*) Public Works Department; (*b*) I think not; (*c*) yes, later on in the west of the district for want of establishment; (*d*) not in sufficient quantity, and the people knew it and traded on the knowledge.

23.—Yes. No. No. Yes.

36, 37, 48.—The minimum wage prescribed at the beginning of the famine was in my opinion too high, and I consider that fining should be carried out down to the penal wage. This fining, however, should be graduated, *e.g.*, a man who does 95 per cent. of the full task should not be fined down to the level of the man who does only 25 per cent.

Early in the famine in Khándesh it was found that thousands of able-bodied men were coming on to the works to do as little work as they possibly could and quite content with the minimum wage. I was therefore authorised to introduce a penal wage of 25 per cent. below the minimum. On considering the matter further, however, I saw that this alone would not meet the case. As practically none of the labourers were doing full work, the result would merely be that practically all would be fined down to the penal wage, and then Government would be in a difficulty; for short of introducing a system of pure payment by results (which had been condemned by the Famine Commission of 1898) no method would remain for dealing with the contumaciously idle. While therefore adopting the penal wage for the most idle, I attempted to discriminate between the excessively lazy and the moderately industrious by introducing a scale of fining; but while this was eventually adopted by Government (Government Resolution No. F.—581, Public Works Department, dated 9th March 1900), it was most unfavourably received when I sought to introduce it three months earlier.

Under the Famine Relief Code the duty of fixing tasks lies with Government in the Public Works Department. But it was not till March 1900 (Government Resolution No. F.—538, dated 5th March 1900, Public Works Department) that any scale of metal-breaking tasks was prescribed. As metal-breaking was one of the chief forms of famine labour, the omission to prescribe these tasks caused some inconvenience. Wages also were fixed by Government.

As regards action in anticipation of sanction, I think the matter of a graduated scale of fines was the only one in

which I was ever overruled, and, as I have said, that principle was adopted by Government three months later. There was, however, one way in which Collectors' arrangements were occasionally set aside in an indirect manner, *viz.*, where Government, having approved certain arrangements reported from one district, directed that the same should be adopted in other districts where the conditions might be materially different, or where other equally satisfactory arrangements might already have been introduced. As examples I may quote the admission of inferior village servants to dole and the method of distributing tagái. The Collector of Ahmedabad sent up proposals in respect of the former, showing the scale on which he proposed to admit men to dole; these proposals were approved and ordered to be adopted everywhere, but they were quite unsuited to the Southern Maráttha Country. Similarly, certain proposals made by the Collector of Poona for the distribution of tagái were prescribed for general adoption, prior to which I in Belgaum had, with the approval of the Commissioner, S. D., introduced a different and equally satisfactory system.

52 to *59*.—No small works had been undertaken up to the time when I left Khándesh.

66.—Great tracts of reserved forests were thrown open to grazing, but the results were not very successful. It was necessary to have grass and drinking water side by side, and, where this combination existed, the herds of cattle soon devoured the grass and trampled and spoiled probably more than they ate.

67.—Mr. R. S. Pearson, Divisional Forest Officer, Western Khándesh, was engaged for some months in cutting and baling grass in the Navápur Petha for export to Gujarát. I believe the results were indifferent, this grass not agreeing at all with cattle accustomed to a different kind of food.

68.—By cooked food, as soon as ever kitchens could be organised.

71.—None up to the time that I left Khándesh; at that time I had just ordered one to be established at Nandurbár (I think).

A. R. BONUS, I.C.S.,
Collector of Belgaum.

9th January 1901.

Mr. K. R. Godbole.

Replies by Mr. K. R. Godbole, Executive Engineer, Sholapur District, to the questions drawn up by the Famine Commission.

9. (*a*) A programme of famine relief works was ready containing provision for the employment of about 139,000 relief workers for six months. Rough plans and estimates giving approximate costs were ready for some work on the programme. For others the sites were inspected, but no plans and estimates had been framed. The works were not located on the ground.

(*b*) No.

10. Large works were contemplated for the giving of relief. The programme also contained small works (improvements and repairs of village roads), which were calculated to employ about 17,000 relief workers for six months.

15. Works first undertaken as test works, were repairs and improvements of Local Board roads. They were ordinary Local Board works, and were conducted under the supervision of the Public Works Department.

16. The tasks assigned were those taken from ordinary labourers on ordinary works. They varied with sex and age, but were independent of the previous occupation of the workers.

17. Payment was strictly in accordance with results. There was a maximum wage, the same as that allowed for class I by the Bombay Famine Code of 1900, but no minimum. There was no rest day allowance or allowance for dependants.

18. Workers remaining on the test works under the adverse conditions described in answer to question 17. Also the large crowds seeking admission on test works.

19. Large works.

20. Under the control of the Public Works Department. Scale of supervising establishment was not prescribed in advance. Establishment was found very much short of requirements. There was some delay in opening additional works, after the first relief works were started. Tool supplies failed after the first works were opened, on account of the great rush on works.

21. The relief works were mostly concentrated works, like large irrigation storage tanks, ballast breaking depôts, etc. Each of these works formed a separate sub-division or charge, and employed from 3,000 to 15,000 relief workers, according to the extent of work to be carried out. When the number of applicants on a work exceeded what it could conveniently accommodate, the excess applicants were drafted to the nearest relief work where there was a

deficiency of workers or a new work was opened for them. There were a few road works, but each of these also mostly formed a separate sub-division or charge.

22. *Establishment.*—Each sub-division or charge had its own establishment which consisted of—

(*a*) sub-divisional officer who was generally a trained Public Works officer or subordinate.

(*b*) One or more professional assistants to the above, who were generally temporary overseers or sub-overseers.

(*c*) Clerical establishment for correspondence, preparation of returns and accounts and checking of muster rolls, etc. This establishment consisted of one clerk, one head kárkun, one checking kárkun for about 3,000 workers, one peon and two office khalásis.

(*d*) One cashier for payments for every 2,000 relief workers. Each cashier had to give a cash security of either R500 or R1,000.

(*e*) Store clerk for keeping accounts of tools, and for registering their issues and receipts.

(*f*) Work establishment consisting of maistries, mustering kárkuns and mucádams. Each mucádam had a gang of about 50 relief workers under him, a mustering kárkun looked after four gangs, and there was generally one maistry for every 1,500 relief workers.

Hutting, Conservancy, Sanitation and Water-supply.—Arrangements regarding these were prescribed as detailed in Appendix IV of the Bombay Famine Code of 1900.

Food-supply.—The special Civil officer was to provide a bázár for food-supply on the work, at a site prepared for it by the Public Works Department, as per Section 92 (*b*) of the Bombay Famine Code of 1900.

Medical Conveniences and Supervision.—The provision of a medical officer, hospitals, medicines, medical comforts and medical supervision, etc., on each relief work, was prescribed as detailed in Sections 174 to 178 of Bombay Famine Code of 1900.

23. Admission to relief works was free to all, except in the Bársi Táluka, which is surrounded by Moglái (His Highness the Nizám's) Territory all round. To prevent the large influx of Moglái subjects on Bársi Táluka works, the "Dákhala" system was introduced for some time. According to this system every applicant for work in the Bársi Táluka had to produce a Revenue officer's certificate or "Dákhala," stating that he was a British subject. No person without such "Dákhala" was admitted. This system was, however, abandoned after some time, under orders from Government.

At the commencement of relief works, when there was an immense rush on works, and when it was impossible to admit all applicants, it was also found necessary for the first fortnight or so, to make selections, priority being given to applicants from distant places and with bad physique. All such

restrictions were, however, removed after a couple of weeks, as soon as further supplies of tools and establishment was received.

There was no distance test, except temporarily, when there was a great rush on works. In such cases, applicants from the surrounding villages (within a radius of five miles) were refused admission, until the more distant applicants were provided for.

Residence on works was not made compulsory until December 1900.

24. A relief work with 10,000 relief workers ought to suffice for the wants of an area of about 400 square miles. In the early stages of the famine, when relief works were few, people travelled as much as 50 miles from their houses to get to a relief work. Generally, they took advantage of a relief work, when it was within a distance of 15 miles from their homes.

25. No. They were independent of Civil authorities in all professional matters, in the management of works and in the tasking and fining of relief labour.

26. Yes. He was generally a senior clerk belonging to the Revenue or Judicial Department, or a School Master, getting from Rs. 60 to Rs. 100 per month. He was independent of the local Public Works officer, and worked directly under the orders of the Civil authorities. The Civil officer had full authority on all matters mentioned at the end of paragraph 426 of the report of the Famine Commission of 1898 except items (II) and (III). The classification and treatment of workers made by the special Civil officer was subject to modification by the Public Works officer, and the calculation and payment of wages were invariably made by the Public Works officer, and not by the Civil officer.

27. No.

28. Generally relief workers from the same family and same village worked in the same gang. Each gang consisted of from 50 to 60 relief workers.

29. The classification of labourers adopted was the same as that given in paragraph 445 of the report of the Famine Commission of 1898. As regards the wage scale, the following departures were made from the scale given in paragraph 456 of the report of the Famine Commission of 1898:—

Class.	Scale proposed by Famine Commission.	Scale adopted in Bombay Presidency.
Class I . .	20 Chattaks .	19 Chattaks.
Class III, working children.	8 Chattaks .	Maximum 10 chattaks. Minimum 7 chattaks.

The departures made in Bombay were justified by

experience. 19 chattaks were found quite sufficient for class I workers. As regards working children, two wages are desirable, to give the elderly children the chance of earning more than 8 chattaks laid down by the Famine Commission of 1898.

30. The classification recommended by the Famine Commission of 1898 and the wage scales adopted in Bombay for relief workers of different classes, caused no difficulty and worked satisfactorily. No distinction need be drawn in the classification and wages of men and women workers.

31. The code system was introduced from the outset. The only modification that was made, was doing away with the minimum wage in the case of one work for some time, payment being made proportionately according to the quantity of work turned out on this work. That is, if the full wage for proper task was A, and if only $\frac{1}{3}$ of the proper task was performed, payment was made to the relief worker at $\frac{1}{3}$ of A, even if this third was below the minimum or reduced minimum wage. The code system and the above system of payment by results were worked for a short time on different works in the Sholápur District, but not on the same work.

32. I agree with the Famine Commission of 1898 in thinking that a system of payment by results is unsuited to conditions of acute distress and severe famine. Code system is the proper system to adopt, in such cases.

33. Different tasks were set to different classes of workers.

Able-bodied workers of the same class were asked to perform the same task each. Allowances were made for new comers, by not fining them for short work, for the first fortnight or three weeks. Relief workers that had necessarily to walk long distances, to get to their work, were allotted proportionately lighter tasks. There were a few changes made in the tasks, in accordance with experience gained. But when once settled for the time being, the tasks were not raised. Greater rigidity was, however, observed in exacting tasks from the able-bodied workers, as they became used to the work, and the contumaciously idle were fined down to the reduced minimum or penal wage in accordance with the work turned out by them.

34. The scale of wages adopted was adequate, on the whole. Perhaps a slight reduction may be made in the class I and class II wages, by reducing them to the grain equivalents of 18 chattaks and 14 chattaks, from the 19 chattak and 15 chattak equivalents, respectively, that have been adopted in the Bombay Famine Code of 1900. I simply throw this out as a suggestion, in the interests of economy, but am diffident regarding it. The condition of the workers was satisfactory, on the scale of wages adopted. A hard working family of adults with one or two children only, saved about 5 per cent. of their earnings, which they expended on clothes, sweets

for children and other small luxuries, but the majority of workers did not save anything. They simply lived on their earnings. The coin received as wages, came freely to Banias and grain dealers on the works and in the adjacent markets. These opinions are based on my personal observations on the works.

35. Rest day wage was given. In acute famine, the system of a separate rest day wage should be adhered to, as a large percentage of workers are not then able to do the allotted tasks. Such workers cannot earn rest day wage, by doing extra work or full tasks.

36. Minimum wage is rather high, and fining may safely be carried down to a penal wage, which should not however be more than $12\frac{1}{2}$ per cent. lower than the present minimum wage of Bombay.

37. The minimum wage was allowed at the outset. It was reduced afterwards to the penal wage, and fining was then carried down to the penal wage. On metal breaking works, the penal wage became general for a short time, as the workers had become demoralised, and used to doing no work and getting the minimum wage below which they could not be fined. On the introduction of the penal wage, however, a considerable percentage of workers improved the outturn of their work, and thus the penal wage had a satisfactory effect. There was no marked suffering or emaciation caused by the infliction of the penal wage.

38. Weekly. More frequent payment is not desirable or practicable.

39. They were paid daily for the first four days a month after the famine works were first started. Just at the commencement of the famine, such daily payments could not be made, on account of want of establishment and the great rush of famine workers. The want of daily payments threw the needy workers into the hands of the Bania. This difficulty can, I think, be got over by feeding new applicants in the work kitchens for the first four days, and giving them cash wages also for these four days. The first cash payment may be made at the end of the four days. This will give the new workers some cash in hand, to go upon, and thus to save the more provident out of them from going into the hands of the Bania.

40. To each individual. Payment should always be made to each individual, on all famine works carried on, on the code task system.

41. The following tables are given for Hutgi and Wadshivne tanks and ballast breaking depôt at Hiraj, for the last weeks in the months of March,

April and May 1900, when the famine pressure was heaviest :—

Hutgi Tank.

Month.	Average number of workers during the week.	Number that got		
		Full wage.	Penal wage.	Between Full and Penal wage.
March 1900 . .	10,136	5,960	311	3,865
April 1900 . .	8,022	4,087	...	3,935
May 1900 . .	6,120	4,889	...	1,231

Wadshivne Tank.

Month.	Average number of workers during the week.	Number that got		
		Full wage.	Penal wage.	Between Full and Penal wage.
March 1900 . .	4,930	2,020	...	2,910
April 1900 . .	7,447	2,034	...	5,413
May 1900 . .	8,115	4,364	34	3,717

Ballast breaking Depôt at Hiraj.

Month.	Average number of workers during the week.	Number that got		
		Full wage.	Penal wage.	Between Full and Penal wage.
March 1900 . .	3,633	519	...	3,114
April 1900 . .	3,491	625	1,028	1,838
May 1900 . .	2,357	110	1,241	1,006

People earning the penal wage continued on the works for a long time, and did not leave on account of low wages obtained.

42. None of the systems of payment by results, referred to in paragraphs 208 to 212 of the report of the Famine Commission of 1898, was adopted. On one work, the minimum and penal minimum were done away with, and payments were made to individuals according to work performed by each as described in answer to question 31 above. This was

practically the same as the code system of individual tasks, the only difference being that fining was continued to below the penal wage.

43. The maximum wage was as follows :—

Class I.—	Grain value of	19	chattaks.
Class II.—	Do.	15	do.
Class III.—	Do.	10	do.

Non-working children were at first relieved by cash payments, in accordance with the provisions of the Famine Code. Kitchens were established afterwards on all works, and the non-working children and dependants were then fed. Weakly persons capable of some work, were given light work, such as making camp roads, cleaning camps, breaking clods, breaking big pieces of murram, etc., and they were given the minimum wage. There was no tasking for them. In future famines, they should, I think, be similarly treated.

44. No, except for the supplies of lime, sand, surkhi and stone. These materials had to be obtained by piece-work rates, on tank works, from local suppliers, as it was necessary to construct some concrete and masonry works to provide employment for relief workers. Where the materials were within small leads, and did not involve carting, their collection was made by famine labour, and not by contract.

45. There was really no payment by results system, as explained in answer to question 42.

46. The Public Works officer in charge of the work obtained every week, from the Revenue authorities, the rate of the staple food-grain ruling at the nearest market, and fixed wages for the week accordingly. The wages were based on the price of bájri or jowári, whichever was the cheaper of the two. Weekly variations were always taken into account, in fixing the wage scale.

47. *Opening Relief Works.*—On receipt of requisition from the Collector regarding the opening of a relief work, after such opening was sanctioned by the Commissioner, the first thing done was the appointment of a suitable Public Works officer or subordinate, for charge of the work. He was then given the establishment detailed in answer to question No. 22, the best available candidates being appointed to the posts. The Collector was informed of the time that would be required for making preparations, and of the numbers of people that could be employed and the dates of their employment. The time required for the preparation varied from one to four weeks, according to the magnitude of the work to be opened.

The sub-divisional officer proceeded immediately, to the site of the work, and secured accommodation for himself, his office, his stores and establishment, either by hiring houses in a neighbouring village, or by erecting temporary structures with bamboos, bamboo mats, corrugated iron and round rafters. He had then to arrange for the following, under the

orders of his superior officers, before the admission of the first drafts of relief workers :—

(*a*) Obtaining the requisite hutting materials, furniture, stationery, forms and tools, by indent on Executive Engineer's stores and by local purchase. Also preparing tools for work, by providing handles, sharpening, etc.

(*b*) Lining out of work, according to plans and levels, etc., furnished to him, and giving profiles for work to be done.

(*c*) Making sites of quarries, borrow pits and spoil banks. Also preparing plans and statements of land to be acquired.

(*d*) Selecting and lining out sites for relief workers' camps, kitchen and hospital and dispensary.

Admitting and classifying Labourers.—The Collector usually appointed a special Civil officer, immediately after the opening of a relief work was sanctioned. This Civil officer admitted relief workers and classified them, and then transferred them to the Public Works officer, for employment on works. There was a special place set apart, for making admissions on a work, and the special Civil officer had usually special drafting kárkuns to assist him in registering applicants and classifying them. Usually, there was no delay in admitting people on the works. The classification of labourers made by special Civil officers had frequently to be revised by Public Works officers.

Providing for Dependants.—The non-working children and old and infirm dependants were immediately put on the kitchen register, by the special Civil officer, and relieved by cooked food. The dependants that were capable of light work, were drafted to works under class IV of the Bombay Famine Code, given light tasks, and paid the minimum wage.

Providing Tools and Plant.—When relief works were first started in this district, there was a great rush on the works, and the tool-supply fell short of requirements. There were also no supplies to be had in India. After a few months, new supplies came from Europe, and supplied the wants of the district. A large number of tools, such as pickaxes, kudalis, phaoras, hammers and sutkis, were locally manufactured. The sub-divisional officers received their tool supplies from the Executive Engineer's stores. They had not to make any purchases themselves.

Measuring Work and imposing Fines.—Almost all the relief works were carried on, on the code task system, and except in metal breaking works, all tasks were given by gangs and sub-gangs. The work for each gang was given daily, and measured daily, but the daily measurements were made approximately by the mustering kárkuns and maistries. At the end of the week, each gang's work was measured by a responsible officer or subordinate of the Public Works Department, and recorded against the total tasks assigned for the week. These

measurement records went up to the Public Works officer in charge of the work, who checked them, and gave orders regarding fining, according to the quantity of work turned out. The tasks and fines were regulated, according to tables drawn up by superior Public Works officers and by Government in Public Works Department. In the case of ballast and metal breaking works, individual tasks were assigned and measured for some weeks, and fines regulated accordingly. No one had authority to give orders regarding fining, except the Public Works officer in charge of the work.

Payments.—After orders regarding fines were issued, the fines were shown in muster rolls, and the clear amount due to each worker was then calculated. The muster rolls, after due checking in the sub-divisional office, were then signed by the Public Works officer in charge of the work, and handed over to cashiers for payment. All payments were finished in two days. Each man's pay was given to him by the cashier, without the intervention of a third party. All payments were made in presence of gang kárkun and gang mucádam, and when practicable, they were supervised by the special Civil officer and Public Works officers and subordinates. The cashiers appointed for making payments were specially selected men, who had furnished cash securities of Rs. 500 or Rs. 1,000, in each case.

Conserving Water-supply.—On almost all relief works, the drinking water was drawn from wells, which were specially guarded against contamination and pollution. Water was served from these wells by special water drawers paid by Government, who served water through vessels provided for the purpose. No one was allowed to dip his own vessel, into the well. Every drinking water well had a raised platform round it, and no soiled water was allowed in its neighbourhood.

Hospital Requirements.—As soon as the starting of a relief work was determined upon, intimation was given to the Sanitary Commissioner, who made the best arrangements he could, for sending a medical officer to the work. This officer was usually a trained Hospital Assistant. Quarters were constructed by the Public Works Department, on a suitable site, for the medical officer and his dispensary, and the necessary supplies of medicines and hospital comforts were received from medical stores. On the arrival of the medical officer, he started his dispensary. Temporary wards were also constructed for the treatment of in-patients, separate wards being provided for males and females. The medical officer had to go round the works, camps, kitchens and amongst the workers, to enable him to watch the physical condition of all. He had also to supervise sanitary arrangements on the works.

48. Tasks were regulated and increased or decreased by Government in the Public Works Department, and by Public Works officers. The Revenue officers had no control, in this respect. The wages were regulated strictly in accordance with the

Bombay Famine Code of 1900. Orders regarding the introduction of the reduced minimum or penal wage, or regarding fining below the penal wage, were issued by the Collector, under instructions from Government in the Famine Department.

49. No.

50. Small village works were started by the Revenue authorities during rains, when it became desirable to employ people near their homes, for cultivation purposes.

51. The small village works were mending of village roads, repairing short Local Fund roads, cutting prickly pear, levelling and draining village sites, etc.

52. They were conducted under the supervision of Civil Agency, and not of the Public Works Department.

67. Dependants on large relief works were relieved at first by cash payments. Kitchens were however established in January and February 1900. Cash payments were then stopped, and cooked food given instead.

93. Yes. The readiness is attributable to loss of self-respect, to a certain extent. A cultivator was very reluctant to go to a relief work, or seek State relief, before the famine of 1896-97. His experience of that famine wore away this reluctance and feeling of delicacy, and he resorted freely to relief works in the famine of 1899-1900, even before his resources were fully exhausted. The methods of State and organised charitable relief have also become better known to the people, since the famine of 1896-97, and this led to the relief works being more readily and largely resorted to, in the famine of 1899-1900, than in previous famines.

94. Yes. After the failure of rains, no sowcárs would make any advances, even on the security of land. I came across several cases on relief works, in which people had come on the works, with sufficient means in their houses to enable them to go on for three or four months.

95. The code test is that of labour combined with a minimum wage. Such a test is not sufficient to deter persons, not in real need of relief, from coming to the relief works.

96. I would introduce the system of Revenue officer's "Dákhalas" and distance test. The "Dákhala" should give the name of the applicant's village, and that being known, it should be made a rule that no one should be employed on a relief work, that is within 15 miles of his home. This distance test will, I think, keep away all well-to-do persons not in real need of relief. The "Dákhala" system will be useful, moreover, in giving exact information, as to how many subjects of Native States are being relieved on Government relief works.

99. The water-supply on works received special and careful attention in the Sholápur District, and was fairly plentiful; and I do not think any increased

deaths resulted from deficient or impure water-supply.

100. Every relief work had a special Civil officer attached to it, one of whose principal duties was to look after the cleaning and sanitation of camps, latrines, etc. Each work had airy and clean camps, well laid out, and trench latrines frequently cleaned and well looked after. The medical officer on the work also helped in supervising sanitation.

102. I have seen as many as 15 per cent. workers on some relief works, using as food, vegetables of various sorts not usually used as articles of diet. The vegetables were mixed with grain, and the mixture formed into bread or cooked as semi-liquid porridge. The use of these vegetables had apparently no bad effect, on the health of the workers.

103. Yes. To a very large extent in this district, which is surrounded by Moglái and other Native States. The Native State applicants concealed their true villages, and tried to pass off as British subjects, and hence it was always difficult to find out, how many of them were on the Government relief works.

108. No. On the contrary, the private employers got too many applicants, whenever they had any field or other work to be done.

111. Section 84 (*b*) of the Bombay Famine Code of 1900 was departed from—*vide* Government Resolution No. 2019, dated 12th April 1900. The code provision was abused to a great extent, several workers taking marching "Bhatta" and not going to the new work at all. According to amended Government orders, the marching days' allowance is to be paid, when relief workers join their new works.

112. Yes. I would suggest pensioned Deputy Collectors, Subordinate Judges, Mámlatdárs and other superior native pensioners of good social position, for being utilised as supervising officers.

114. (*a*) There was practically no system of payment by results in this district.

(*b*) and (*c*) The small changes made in tasks and wage scales, had no appreciable effect on numbers seeking relief, or on death rate.

(*d*) The slight departures made in the mode of calculating fines, had also no effect on the numbers of workers or on death rate.

(*e*) As regards compulsory residence on works, this was only insisted upon, when there was hutting available. It had therefore no effect, on the numbers seeking relief, and on death rate. The drafting to distant works, however, was very unpopular, and when relief seekers and workers were ordered to go to distant works, very few went, even with the payment of marching days' allowances. The following

are the results of some of the drafts that were made to distant works:—

Date of draft.	Number of workers drafted.	Work from which drafted.	Work to which drafted.	Distance in miles.	Number that joined the new work.	Remarks.
29th January 1900 .	4,000	Kuslamb-Yermala Road.	Bhambardi Tanki.	70	2,163	Allowance was given for marching days in these drafts, as per Section 84 of the Bombay Famine Code of 1900.
3rd April 1900 .	1,051	Mangi Tank.	Do. .	59	536	
2nd July 1900 .	2,029	Do. .	Wadshivne Tank.	22	400	
23rd July 1900 .	2,937	Do. .	Do. .	22	1,371	
13th August 1900 .	1,321	Do. .	Do. .	22	91	
8th December 1900 .	2,000	Mohol-Pandharpur Road.	Hutgi Tank.	43	1,009	

The above table shows the great unwillingness of people to go to distant relief works, for relief. This indicates that those that refused to go, were not reduced to last straits, and were not in urgent need of relief. The drafting to distant works caused some distress and disorganisation, but I do not think it had any marked effect on death rate.

115. The massing of people on large works tends to disorganise family life, relax moral ties and weaken social restraints, but I think this is inevitable, and cannot be helped. One precaution should, however, be taken, and that is, to allow the members of the same family and of the same caste to live near each other, and in the same camp. This will tend to restore some of the restraint of public opinion, which exists in Indian village life.

Mr. J. McNeill, I. C. S.

Answers by Mr. J. McNeill, I. C. S., Collector of Poona, to the questions of the Famine Commission.

When the rains of 1899 commenced the outlook was not free from anxiety, as the first monsoon rains were light and sowing operations were slightly delayed. The kharif harvest of 1897 was good, 10 to 12 annas, taking 12 annas as normal, in the four western tálukas Haveli, Mával, Khed, and Junnar, and poor in the eastern tálukas Purandhar, Sirur, Bhimthadi, and Indápur, where the crop averaged about 6 annas. The rabi harvest over the whole district was estimated at from 6 to 8 annas. The average area under rabi and under kharif crops in the four eastern tálukas and in the four western tálukas is as follows :—

	Kharif.	Rabi.
Eastern Tálukas	4,04,727	6,38,745
Western Tálukas	6,19,943	1,99,446
	10,24,670	8,38,191

These figures are given separately, as in the western tálukas the kharif harvest is more important, while in the eastern tálukas more than three-fourths of the area is usually under rabi crops and the rainfall is much smaller and more uncertain.

In 1898 neither the kharif nor the rabi harvests differed much in outturn from those of 1897, the kharif harvest in the eastern tálukas being perhaps slightly less favourable. In the Dhond Peta in east of the district, with a population of 49,540, the harvest has been poor for the last five years.

2. The area shown with kharif crops was 67·6 of the normal kharif cultivated area. The normal cultivated area is arrived at by taking the average of the years 1892-93, 1893-94, 1894-95, 1895-96, 1897-98. The year 1896-97 is excluded as it was a famine year. The years on which the calculation is based were average years.

(*a*) and (*b*) The rainfall recorded in the west of the district is so much greater than that recorded in the east that the average for each of the táluka stations is given.

Station.	Average Rainfall.	Rainfall in 1899.
Poona	35·10	12·37
Paud	64·94	28·61
Vadgaon	44·29	18·56
Khed	25·90	13·63
Ghoda	30·44	16·11
Junnar	34·51	16·32
Sirur	23·54	12·92
Sásvad	24·57	15·34
Bárámati	25·56	12·72
Dhond	23·86	14·68
Indápur	22·75	19·2

In the six western stations the rainfall varied from 35·2 to 52·9 per cent. of the average and in the five eastern from 49·7 to 83·6 per cent. of the average.

(*c*) The rain ceased on 24th October 1899.

(*d*) The distribution of rainfall from June to September compared with the average was as under:—

Station.	June.	July.	August.	Sept.
Poona ...	3·75	1·39	·63	2·67
	6·23	*8·98*	*3·95*	*5·88*
Paud ...	6·61	7·25	4·17	4·51
	10·38	*26·70*	*14 84*	*6·80*
Vadgaon ...	8·82	2·77	1·80	1·35
	8·14	*15·95*	*9·5*	*5·56*
Khed ...	5·85	1·33	·78	1·93
	5·97	*6·55*	*3·67*	*4·20*
Ghoda ...	5·87	2·44	1·4	1·93
	6·30	*9·11*	*4 64*	*5·11*
Junnar ...	6.71	2·49	1·42	3·48
	6·8	*10·23*	*5·32*	*6·37*
Sirur ...	3·45	·3	·27	4·22
	4·24	*2·28*	*1·61*	*8·10*
Sásvad ...	7·54	1·5	·28	4·68
	4·14	*5·16*	*2·13*	*4·72*
Bárámati ...	1·62	·13	·14	5·34
	4·5	*2·76*	*1·61*	*7·38*
Dhond ...	1·90	·33	·29	10·39
	5·38	*2·16*	*·77*	*6·82*
Indápur ...	·88	·23	·54	11·80
	3·35	*2·50*	*2·21*	*7·2*

4. The actual kharif harvest of 1899 represented 10·08 per cent. of the outturn from the normal cultivated kharif area in a normal year. The percentage has been arrived at by applying standard formulæ of outturn to the actual and normal figures.

5. (*a*) Jamábandi Return No. 6. Registered occupants with holding not exceeding 25 acres...	43,756
Taking each of these as head of a family of five, the total population in their families would be about	2,18,780
Cultivating tenants and sharers as in Imperial Census	85,401
Total ...	3,04,181
(*b*) Agricultural labourers (*i.e.* farm servants and field labourers and crop-watchers as in Imperial Census)	73,428
Total population	10,67,800
Percentage of (*a*)	29
Percentage of (*b*)	7

6. The necessity for relief was assumed from the fact of crop failure and the other facts stated in the reply next following.

7. The observed facts which indicated the necessity of adopting relief measures were—

(*a*) The great deficiency in the rainfall especially during periods when rain was most needed.

(*b*) The rise in prices.

(*c*) The failure of crops as observed and reported.

(*d*) The popular demand for relief and the simultaneous absence of employment on ordinary field work.

8. The first measures of relief taken were the opening of four test works in Kalamb, Khed, Khadakala, and Ranjangaon Ganapati, and of three others soon afterwards. On these works payment was made strictly by results. Six of the works were road works where people were employed on breaking metal, and one was a tank work.

9. (*a*) The annually revised programme of small and large relief works was ready. In some cases the survey and estimates were made out and in some they were not.

(*b*) The relief programme did not include scales of establishment necessary to meet any emergency. No lists of candidates qualified for famine service were kept up. It is believed that the revision of any such list would involve more trouble than its ultimate value would justify.

10. The relief programme contemplated large public works as the backbone of the relief system. The programme also included a large number of village works.

11. The sequence of relief measures was as under :—

(*a*) Test works. Opening of Government forests.

(*b*) Kitchens on works. There were no other kitchens, but the kitchens on works served not only dependants but also persons from adjoining villages who would otherwise have been in receipt of dole.

(*c*) Poor-houses.

(*d*) Organisation of private charity.

12. (*a*) When the necessity for undertaking relief measures was evident the Circle Inspectors as well as village officers were ordered to make inquiry and bring to the notice of Mámlatdárs cases of destitution, small allotments being assigned to each Mámlatdár to enable him to relieve destitute people unable to work. In urgent cases the village officers were authorised to supply food and report their action to the Mámlatdár. This action was taken in the middle of November, the grant of gratuitous relief to necessary village servents being at the same time introduced and village committees appointed to carrry out the system. From the beginning of January the system of gratuitous relief in villages was regularly organised by appointing additional Circle Inspectors and Head Karkuns to supervise the work of village officers who were authorized to supply food to persons of the class mentioned, the supervising staff working under the orders of the Mámlatdárs.

(*b*) The local employment of labour was stimulated by the grant of Tagái loans for land improvements and to a very much smaller extent by the

expenditure of small sums on deepening village wells. No other action involving local inspection and control was taken in this direction.

(*c*) Outside of Poona City local charity can hardly be said to have been organised. In each táluka and peta committees were appointed to assist in the distribution of Charitable Relief Funds obtained from outside sources.

In Poona City a committee (the City Relief Fund Committee) was chosen at a public meeting, at which the Collector presided, to manage a cheap grain shop and to collect subscriptions to meet the deficiency arising from the sale of grain at less than cost price. There was no official inspection or control over the committee's work.

(*d*) The special staff supervising the work of village relief at the same time necessarily observed the general condition of the people and brought to notice any matters of importance.

13. Up to the end of November Rs. 9,020 were granted under Act XIX of 1883 for land improvements and Rs. 31,547 under the Agriculturists' Loans Act of 1884 for the purchase of seed and cattle. The loans granted up to the end of November were advanced in the ordinary course and under the ordinary conditions. In December, January and February less than Rs. 1,000 altogether were advanced under the Agriculturists' Loans Act, the advances for land improvements during those months being Rs. 17,520, Rs. 23,270, and Rs. 60,382, respectively. Of these latter advances the majority were for constructing or improving wells, the only other improvement for which considerable sums were granted being the conversion of dry crop land into rice land. They were granted under the usual conditions as to interest and repayment, the instalments of repayment being fixed with regard to the estimated profits. The recipients of advances included all classes of agriculturists, whether registered occupants or inferior holders, who could give security for repayment. All loans were recoverable, the instalments in the case of loans for land improvements being fixed as above stated. Loans for the purchase of seed were recoverable in one instalment and those for the purchase of cattle in one or more instalments according to the amount advanced.

14. Irrigation wells can be made in all but the hilly parts of the district in the west.

It is impossible to state with any approach to accuracy what was the average depth below the surface of water on the cessation of the rains in 1899. The depth probably varied from a few feet up to 30 feet, but with considerable variations even in the wells of a single village an estimate of average depth would be guess work. In the plains, excluding villages with canal irrigation, probably 25 feet would be a rough approximation.

Throughout the year the digging of wells was encouraged by granting loans for the purpose.

(*a*) Wells constructed out of loans were rarely, if ever, successful in securing a growing crop.

(*b*) and (*c*) The construction of wells out of Tagái advances resulted in permanent improvement and afford temporary labour. In both respects they were successful, though in some cases the full amount of the advance may not have been spent on the work.

15. Four test works in different localities were first undertaken at Government expense under the supervision of the Public Works Department. The nature of the employment at all the works was metal-breaking.

59. In the Northern Tálukas there are a few thousand Thákurs, who are probably aborigines. A small sum was spent out of Local Funds on employing them on petty works. Mr. Orr, under whose control the amount was spent, will give evidence on the subject. One tank clearing work was also undertaken for the special benefit of the Kolis near Purandhar.

60. Two forest works were opened. In the west of the district, *i.e.* in Junnar and Khed Tálukas, and Ambegaon and Mulshi Petas, reserves were demarcated in 18 villages, selected in consultation with the local revenue officers. Stone and mud walls 2 feet broad by 2 feet high were constructed, the total mileage completed being 28¼. The total number of units employed and the rate of pay of each class were as under—

Men ...	...	2 annas	20,235
Women ...	...	1½ annas	31,429
Children ...	...	1 anna	11,034

The varying condition of the work prohibited anything like a fixed test, but every effort was made to obtain a satisfactory day's work from those employed by constant departmental supervision. The classes served were generally the poorer inhabitants of the villages in the hilly forest country—Marathas, Dolis, and Dhangars. The total outlay was Rs. 6,372. In 26 selected villages in Bhimthadi, Sirur, Indápur, and Dhond, *i.e.* in the east of the district, babul coupes were demarcated by trenches, the total mileage constructed being 105¼. At the same time prickly-pear was eradicated in places. The work was done as piece work, the rate fixed being Rs. 1-8-0 per hundred running feet, the dimensions of the trenches being 1¾ feet in depth and three-quarters of a foot broad at the bottom to 3½ feet broad at the top. The daily average number of workers was 355 from 15th May to 8th August, and the total wages paid to labourers amounted to Rs. 8,310. No fodder works were opened.

61. Able-bodied persons were never engaged on works of private utility at public expense.

62. The only artisans relieved in their own castes were the Poona weavers, who were relieved out of charitable funds. A local committee consisting of officials and non-officials carried out the relief

measures under the control of the Collector. Yarn was supplied to the weavers, who wove this into saris and jackets, the size of the article being determined by the quantity of yarn supplied. They were paid at the rate of 13 annas to 1 rupee per sari and 4 annas per jacket. Altogether Rs. 13,445-7-11 were spent and 5,416 saris and 132 jackets were made, the estimated value of the articles manufactured being at current rates Rs. 11,509. Of the total outlay Rs. 8,163 were on material, Rs. 4,989 on wages and Rs. 293 on petty items. This system of relief was commenced in August and continued till the end of November.

Of the articles prepared 1,660 saris were distributed as free gifts of clothing to the poor in the district and 158 saris and 29 kamlas have been sold; the remainder are in stock. Of the articles in stock a quantity are now being sent for distribution on relief works and elsewhere. Efforts were made to sell the articles at cost price, but though dealers in several districts were addressed, there was very little demand.

63. I do not think that the Poona weavers were physically fit to do ordinary labour and they were certainly unwilling to go on ordinary relief works. Their practice is when work gets slack in Poona to go to other weaving centres in search of work as some did during the past year.

65. Compressed grass was imported from outside and distributed, a part being sold at reduced rates to cultivators and a part being given as tagái. Altogether nearly eighty lákhs of pounds were received and distributed. In a year when fodder was very dear, the provision of this additional supply undoubtedly saved a large number of cattle.

66. Compressed grass was not exported from this district to other districts.

67. Dependants on large public works were relieved by cooked food in kitchens and by cash payment to nursing mothers. No dependants were relieved on small village works.

68. Gratuitous relief was ordinarily in the form of a grain dole to

(*a*) necessary village servants;

(*b*) to persons who were unable to work, and whose relatives, if any, were unable to support them.

Three poor-houses were established, the inmates being supplied with cooked food. From kitchens and poor-houses cooked food was distributed to persons in the neighbourhood who would otherwise have been in receipt of grain dole. The grain dole system was that most employed, because it combined efficiency with economy. It would have been impossible to remove all deserving recipients of dole to central poor-houses or to open a large number of poor-houses or kitchens. The village officers, under the supervision of Circle Inspectors, Extra Head Kárkuns, Mámlatdárs, and Assistant Collectors, could distribute grain in the villages by arrangement with a Bania. They could not supply cooked food and the cost of establishing and maintaining a large number of kitchens would have been

excessive. Where poor-houses or kitchens could supply cooked food, this was given under orders of Government, and it is believed that the distribution of cooked food is less liable to be abused.

The number relieved in poor-houses had never been one-eighth of the number relieved by dole in villages, and after the monsoon had set in the numbers in dole rose very largely, while the number in poor-houses declined until October, when poor-houses were closed. During the monsoon it was considered desirable to give the dole to deserving able-bodied persons employed on cultivating their fields.

69. As stated in the reply to the last question able-bodied cultivators were given the dole during the monsoon. No test was applied, but the recipients were selected by the village officers and the selection supervised by the special táluka staff as well as by the Mámlatdár and the Assistant Collectors. Those selected for relief were understood to be persons who could not maintain themselves while working in their own fields.

70. Three poor-houses were opened in the district at the places and on the dates named in the margin. The third column of the table shows the maximum attendance during any week. The poor-house inmates were mostly wandering beggars and a few week and infirm persons from the surrounding villages.

	Date.	Inmates.
1 Poona poor-house at Hadapsar	9th March 1900 ...	403
2 Bárámati	18th February 1900.	1488
3 Sáswad	16th May 1900 ...	167

71. Poor-houses were used as depôts for vagrants and immigrants. The Poona poor-house was almost entirely peopled by such persons, the police removing them from the City in batches periodically. Persons refusing to work on relief works were not sent to poor-houses as a punishment. The transfer would seldom have been regarded as a punishment.

72. The poor-houses were weeded out periodically.

73. 18 kitchens were opened in this district before the rains broke. Out of these 5 were closed and two others were opened after the rains broke. A kitchen was expected to serve a radius of three miles.

74. The rations provided were those prescribed in section 105 of the Famine Relief Code. Meals were distributed on two occasions, once in the morning between 10 and 11 A.M., and again in the evening between 5 and 6 P.M. People were compelled to feed on the premises and were not allowed to take food away.

75. In this district civil kitchens were invariably opened close to relief works.

76. Kitchens were open to—

(*a*) dependants, *i.e.* non-working children and adults unable to work, such as the blind, lame, aged, &c.

(*b*) nominally worked persons and not to others.

77. The poor-house ration was the same as the kitchen ration prescribed in section 105 of the Famine Relief Code, and the grain used was generally the staple food grain commonly used by the people in the locality. It was varied to meet the case of sickness or weakness when any special rations prescribed by the Medical Officer were given.

78. The village gratuitous relief lists were drawn up by the village officers and were checked by the Circle Inspectors, Extra Head Kárkuns, the District Agricultural Inspector, the Mámlatdárs, Assistant Collectors and the Collector. The recipients were inspected by the village officers and the village dole committees every week at the time of dole distribution, and by the Circle Inspectors once every fortnight.

79. Payment of dole was made in grain weekly in the village chávdi of the principal village of the Circle where Banias were available for the distribution of grain. The village officers supplied dole at the houses of recipients who could not attend the general distribution, or the grain was given to a relative or friend for delivery.

80. Gratuitous relief was given to agriculturists who are not metioned in the Code with a view to enable them to cultivate their lands as stated above (see reply to question 68). It was given during the cultivating season and continued until the commencement of the kharif harvest.

81. The cooks employed were generally of the Marátha caste. As some persons of the Gurava, Lingáyat and Brahmin castes objected throughout to take food cooked by Marathas, they were given dry rations and were asked to cook their own food.

82. The superintendent of a kitchen and the storekeeper were in charge of kitchens. The Special Civil Officer in charge of the relief work for which the kitchens were opened was the immediate supervising officer who was entrusted with the work of examining the kitchen accounts and making payments for provisions, &c. The Mámlatdárs and the Assistant Collector while on tour inspected and examined the kitchen accounts, some of which were also examined by the Special Duty Auditor.

83. A cheap grain shop was opened in Poona City by Sardar Oomar Jamal from December and was closed on the opening of another shop opened by the Poona Relief Fund Committee. The first was opened at Sardar Oomar Jamal's private expense and the capital of the other was made up of subscriptions collected by the Poona Relief Fund Committee and of contributions made from the Indian Famine Charitable Relief Fund. The Committee's shop was intended to benefit the poorer classes generally. The benefits were restricted by selling only the cheaper qualities of grain and by limiting the quantity which could be purchased at one time. These restrictions were sufficient and in practice only the poorest classes frequented the shop. The shop was

successful in so far as it fulfilled its object of supplying grain at a slightly reduced price.

84. Neither importation nor the price of grain were affected noticeably by the shop's transactions.

85. The amount of land revenue remitted during the year was Rs. 1,590-13-3. Suspensions strictly in accordance with the provisions of Chapter X of the Famine Code were not granted. The collections were not formally suspended over any defined area. General orders were issued to Mámlatdárs directing them to issue notices only to such defaulters as were known to be able to pay, and they were directed to submit recommendations for remissions and suspensions after inquiry. The total amount for collection was Rs. 14,29,232-1-10, the amount collected Rs. 7,45,830-8-1 and the amount outstanding at the close of the year was Rs. 6,81,810-12-6. This latter amount cannot be strictly called suspended revenue as formal orders specifically authorizing its suspension were not issued, but for all practical purposes it was suspended revenue, as the ryots knew that pending the completion of inquiries its payment would not be enforced.

86. As above stated the Mámlatdár was directed to issue notices only to defaulters who were known to be able to pay. The liability to pay depended not on the year's crop but on the general capacity of the individual. This capacity was ascertained by the Mámlatdár, who issued notices to defaulters able to pay, but the Assistant Collector's sanction was required before any further action could be taken. The Mámlatdár would ordinarily be guided by the village officers' information, but would also obtain information from other sources and would be held responsible for satisfying himself as to the correctness of the information.

87. Suspensions and remissions were not decided before collections began. Final proposals regarding suspensions and remissions were not submitted from the tálukas until the close of the revenue year, and before orders were passed it was evident that the crop outturn of the current year would be below normal. Further action was not taken and proposals for suspensions and remissions affecting all revenue in arrears, both past and current years', are now under preparation.

88. In the Inám villages of the district the suspension or remission of revenue was not dependent on the action taken in the Government villages. If the rayats failed to pay, the Inámdár instituted suits in the Revenue Courts or allowed the recovery to be postponed as he considered proper.

89. I was not in charge of the district till the end of last monsoon. I have since travelled in four tálukas and found no reason to suppose that the relief granted was insufficient or that relief was granted or withheld improperly. Though many petitions were made orally and in writing, no one complained of the action taken. People seemed more concerned about the future than the past.

90. The number on relief never approached 15 per cent. of the population.

91. I have no reason to suppose that relief was ever excessive or defective apart from isolated cases of undue liberality in the distribution of dole in villages in the monsoon. My grounds for thinking this liberality occurred are based mainly on the percentage admitted to dole as compared with the figures in other similar villages and on the fact that supervising officers on inquiry found instances of such liberality and curtailed the dole. I was not in charge of the district until October 1900.

92. I cannot give even approximate figures showing separately the numbers of State rayats, occupancy tenants, and other tenants in receipt of relief. The great majority were labourers and annual tenants, and a comparatively small number were of the class of registered occupants (*i.e.* State occupants) or tenants under leases of a term of years.

93. My experience does not enable me to state whether people were more or less willing to come on relief.

94. Since I took charge in October, I gathered that during the past year credit had been contracted in parts where there had been a succession of bad harvests. The Sávkárs were not merely unwilling but unable to lend as freely as before, as former loans had not been repaid.

95. From my short experience of the last few months I should say that tests are generally sufficient. Lowcaste people from villages in the immediate neighbourhood of a work may come on the work before actually compelled to seek relief or may come intermittently when they can find no more attractive employment.

96. See the last reply. I should not care to undertake any system of selection, but if I had reason to suppose that people went on relief work simply because the work was near, and some members of a family could earn the minimum wage by doing little more than attend at the musters, I should test their need of relief by drafting them to a work at some distance.

97. The Special Civil Officers on works keep a record of births and deaths and submit returns to the Deputy Sanitary Commissioner monthly. In their weekly diaries, which are scrutinised by the Executive Engineer, the Assistant Collectors, the Collector and the Commissioner, the weekly number of births and deaths is stated.

98. The Deputy Sanitary Commissioner would be best able to reply to this question. From such information as is available, I do not think that any connection between the mortality and the quality of food supplied could be established. When on plague duty in Poona City last year I remember that some of the deaths, mostly of children, were attributed to unsuitable food. The number was small.

99. The mortality is not known to have been affected by the impurity or insufficiency of the water-supply except where cholera actually appeared. A considerable sum was spent in deepening village wells at the expense of Government, besides the ordinary outlay by Local Boards on constructing or improving wells. Permanganate of potash was used to disinfect wells near relief works, the intervals being generally left to the discretion of the Hospital Assistants subject to the orders of the Deputy Sanitary Commissioner.

100. Attention was paid to cleanliness generally in and near poor-houses and kitchens. Care was taken to protect the water-supply from pollution, and drinking water was boiled and filtered. Latrine trenches were dug at a reasonable distance. The sanitary arrangements were under the special supervision of the District Medical Officer and the Deputy Sanitary Comissioner, but all District and Táluka officers visiting poor-houses and kitchens saw if the arrangements were being carried out.

101. Grain shops on works were directly supervised by the Special Civil Officers. Reports show that in one or two instances objection was effectively taken to the quality of grains.

102. I can find no reliable information as to the extent to which wild products were used to supplement ordinary food.

103. I had not an opportunity of personally observing immigration from Native States. I did not gather that it was very marked, and such immigration as is said to have occurred would seem to have been the natural result of the position of works in the district near the borders of Native State territory where the conditions of villages on both sides of the border were alike.

104. Separate statistics of the mortality amongst immigrants are not available.

104. (*a*) At the end of the famine some orphans were taken by their relatives, some were sent to a Hindu orphanage for boys in the Thána district, and the remainder were made over to Missionaries.

105. I have no suggestions to make regarding the classification of the objects of the Famine Relief Fund nor regarding the management of the fund.

106. I heard no complaints regarding Railway traffic arrangements.

107. The Station Master supplied information weekly regarding the imports and exports of grain by rail. There is no river-borne trade and the road-borne traffic was unimportant. The statistics are believed to be reliable.

The excess of imports over exports of grain from August 1899 to August 1900 was 191,421,280 lbs. The assumed consumption during the same period at $1\frac{1}{2}$ lbs. per head per day was 602,250,000 lbs. taking the total population at 1,100,000. The net imports by rail 31·7 per cent. of this consumption.

108. I personally heard of no complaints from employers of private labour as to difficulties

experienced in obtaining labourers. I understand that wages were everywhere much lower than usual.

109. (*a*) During the past two years double cropping shows an increase of about 10 per cent. as compared with the average figures of the few years preceding. The total area double cropped has never reached 100,000 acres, and the increase is from about 84,000 acres to about 94,000 acres.

(*b*) The statistics do not point to the substitution of food crops for more valuable crops or vice versâ. There have been fluctuations, but no steady movement in one direction.

110. The practice of paying wages in grain still prevails. I cannot state if there is a tendency to substitute a cash for a grain wage. Cash wages in the towns have risen with the rise in grain prices.

111. I know of no departure from the provisions of the Famine Code other than in the manner in which revenue was suspended. No general order of suspension was issued. The liability to pay remained, but those who did not pay were not compelled to pay till it was decided that they could pay. Persons called upon to pay, if dissatisfied, could apply to the Assistant Collector or the Collector for suspension. I think this departure from the wording of the Code was desirable, as those who were unable to pay without serious hardship did not pay, while those who could pay did not withhold payment. If inquiry into each individual case were a necessary preliminary to recovery, a special staff for this work alone would be needed. The system adopted worked well as is shown by the amounts recovered and in arrears, and the absence of outcry.

112. Special Civil Officers were employed in supervision. Pensioned Native Officers were employed by the Executive Engineer.

Supervising officers might be drawn from any department where the work had either not increased or had decreased during the existence of famine. Though in some districts Forest Officers were needed for special duty, the work in others must have been normal or less than usual, and duties ordinarily discharged by superior or subordinate officers might, it is suggested, be performed by substitutes promoted temporarily to act. Possibly the Educational Department might lend assistance in providing suitable incumbents for minor posts at least.

113. Non-official assistance was obtained generally in distributing charitable relief. In Poona City the non-official assistance was valuable, both in administering gratuitous relief and in supervising the work of weavers as above described.

The distribution of State gratuitous relief was also performed with the help of local committees in the towns and villages throughout the district. The assistance does not seem to have been valuable. The chief function of the local committees was to serve as a check on the village officers, but it does not seem they generally took an active interest in supervising the work of distribution.

J. McNEILL,
Acting Collector.

Dr. J. H. HORTON.

Answers by Dr. J. H. Horton, Acting Civil Surgeon, Bijápur, to the questions of the Famine Commission.

Question 71.—(1) The Government poor-house, Bijápur, was opened on 20th March 1900. The total number of persons admitted up to 31st December 1900 was 433. The largest number admitted on any one day with the exception noted below was on the 10th July 1900, when 16 were admitted. The exception referred to was due to the closing of the Municipal poor-house, Bijápur, on the 1st August 1900, when 36 persons were transferred to the Government poor-house, Bijápur. The largest number of persons in the poor-house on any one day was 124 on the 8th of August 1900.

(2) The majority of inmates were coolies or persons doing agricultural work on hire. 77 weavers were admitted. The remainder were people who owing to some infirmity or misfortune were maintaining themselves begging. A statement showing the caste of the inmates is given below :—

Marátha	... 137	Fishermen	... 20
Weavers	... 77	Lingáyat	... 12
Musalmán	... 56	Shoe-maker	... 11
Mahár	... 53	Skin-dyer	... 10
Lamáni	... 25	Kaikari	.. 6
Shepherd	... 20	Panchar	... 1

72.—(1) The poor-house was not used as a depôt for vagrants or immigrants, though when persons applied for relief who were fit to work they were allowed to remain some days at the poor-house before being transferred to relief works. No vagrant or immigrant was compelled to go to or remain in the poor-house.

(2) No persons refusing to work on relief works were sent to the poor-house as a punishment.

73.—Measures were periodically taken to weed out the poor-house and send people to their homes or to relief works about once a fortnight.

During the greater portion of the time those persons who were considered fit to work and were willing to go on relief work were sent to the Sangogi Famine Relief Camp. These were provided with three days' ration to maintain them on the way. When cholera broke out on this relief camp the inmates were not sent there.

Those who refused to go on relief works or preferred to go home were provided with a ration, the amount depending on the distance to their homes.

74.—The poor-house ration was in accordance with the Famine Code. Jowári was the grain issued. Above the age of 12, 15oz. jowári flour, 2oz. dal, ½oz. salt, ½oz. curry-stuff, ½oz. oil.

From 8 to 12 years, 9oz. jowári, 1oz. dal, ½oz. salt, ¼oz. curry-stuff, ¼ oz. oil.

From 1 to 7 years, 7oz. jowári, 1oz. dal, ⅛oz. salt, ½oz. curry-stuff, ¼oz. oil.

Nursing mothers were given 1 lb. 8oz. jowári, 4oz. dal, ½oz. salt, 1oz. curry-stuff, 1oz. oil.

This ration was varied in the case of sickness or weakness.

Rice was substituted in lieu of jowári where necessary, and 8oz. milk with ½oz. salt in lieu of dal. Extra diet was given when from any circumstance, such as emaciation, etc., the ordinary ration appeared insufficient.

78.—(1) Up till September 1900 a female cook, Lingáyat by caste, was employed from outside. Afterwards in accordance with the Famine Code the cooks were chosen from among the inmates.

Of these one was a Lingáyat and the remainder weavers by caste.

(2) Even when a Lingáyat cook was employed some of the Lingáyat inmates preferred to cook their own food. To these dry ration was issued daily. No other caste objected to take cooked food. No Bráhmans applied for admission. I am informed that their reason for not applying was that they objected to mixing with people of other caste in the poor-house.

96.—The water-supply was sufficient for the greater part of the year. An increase in mortality was due to cholera. The first case of cholera in Bijápur town occurred on 11th June 1900. There were 262 attacks and 132 deaths in the town. The last case occurred on the 20th August 1900.

Permanganate of potash was used to disinfect a large number of the wells in the town. Owing to the great number of wells, many of which were private, they were not all disinfected. The poor-house well was disinfected.

97.—At the Bijápur Government poor-house, situated in the Ibráhim Rouza, a sweeper was employed at Rs. 3 per month to clean the compound and latrines. The night-soil was removed to a pit at a distance of about a quarter of a mile.

The latrines were sufficient and *pukka* built. The well in the poor-house ran nearly dry at one period, but was thoroughly cleaned and holds sufficient water.

The arrangements were under the supervision of the Civil Surgeon and the Senior Hospital Assistant, Civil Hospital.

J. H. HORTON,
Acting Civil Surgeon, Bijápur.

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Mr. A. W. SHEPARD.

Answers by Mr. A. W. Shepard, Executive Engineer, Bijápur District, to the questions of the Famine Commission.

Preliminary Action.

Question 8.—Test works were undertaken by the Revenue Department in the Ahmedabad District in clearing silt from certain village tanks.

In Belgaum test works were managed by the Public Works Department, chiefly metal-breaking and the collection of hard murum. These works were carried out by piece-work and payments made weekly strictly according to results, and as there was no allowance for non-working children and dependants and no hutting provided, the test was sufficiently severe.

9.—(a) In the Ahmedabad District the programme of famine relief works was quite insufficient and incomplete; there were nothing like sufficient works ready, and for others surveys and plans and estimates had not been made. The possibility of famine in Ahmedabad does not seem to have been seriously considered.

(b) The relief programme did not include scales of establishment. I saw no lists of candidates qualified for famine service.

In the relief programme for the Belgaum District there were sufficient works.

10.—The relief programme for the Ahmedabad District contemplated both large works and village tank works, but surveys for the latter had not been made beforehand. Both in Ahmedabad and Belgaum large works were intended to be the backbone of the system of relief.

14.—I consider that irrigation wells can be made with success in many parts of the Ahmedabad District, but the chief difficulty is that in the parts where good water is most wanted salt water is met with and the finding of good water even fit for irrigation is most uncertain.

15.—See reply to question 8.

16.—In Belgaum test works were conducted on the piece-work system.

17.—Payment was in strict proportion to the results limited to a maximum equal to the amount earnable under the Code wages. There was no allowance for dependants and no minimum.

At first the people were allowed to earn an amount to include a rest-day allowance, but afterwards this was altered.

18.—In Belgaum it was decided to convert test works into regular famine relief works on account of the steady increase in the numbers and sustained demand for work, with the obvious effort of the people to earn as much as possible, together with signs that they felt difficulty in providing for their dependent children.

Large Public Works.

19.—In both Ahmedabad and Belgaum Districts the first regular relief works opened were large public works and not village works.

20.—These works were under the control of the Public Works Department. The supervising establishment necessary depends on the numbers on the work, and the number of people expected on any given work is not known beforehand; very wide guesses are made.

Works were commenced in plenty of time in the Belgaum District, but I think that famine was declared too late in the Ahmedabad District. Tools and plant were available.

In the Belgaum District the Public Works Department establishment employed on the test works were ready for employment on the regular famine works immediately they were started: the numbers were not great and were easily dealt with.

In the Ahmedabad District the special establishment necessary when regular famine relief works were started was not forthcoming immediately, and the extent and acuteness of the famine had, I think, been under-estimated. Regular famine works were opened hurriedly and too close to Ahmedabad town in my opinion,

People came in by train from long distances and the town vagrants were cleared out and forced on to the works by the police.

21.—Works were divided into separate charges intended for 2,000 to 4,000 workers, but in Ahmedabad these numbers were much exceeded by the rush of applicants. Other works were opened as soon as possible and the people drafted to them to relieve the pressure.

22.—Yes.

One charge might consist of the following establishment for 4,000 to 5,000 workers:—

1 Overseer or supervisor.

2 Sub-overseers.

2 Maistris.

20 Kárkuns.

2 Cashiers.

1 Store clerk.

1 Assistant store clerk.

20 Mukádams and khalásis.

Conservancy and water-supply, chowkidárs or guards according to circumstances.

Office.

1 Daftar kárkun.

1 Assistant daftar kárkun.

4 Checking kárkuns.

3 Peons.

For piece-work or for a compact work the out-door establishment might be somewhat reduced.

The arrangements for hutting, conservancy, water-supply, food supply and medical conveniences and supervision are prescribed in the revised Famine Code and in various Government Resolutions.

23.—All applicants were admitted and nothing of the nature of admission by ticket was tried while I was at Ahmedabad or at Belgaum.

Residence on the work was compulsory except when the hutting arrangements were incomplete.

A distance test was not insisted on; there was not a sufficient choice of works to be able to do so.

24.—The area which a large public work for 10,000 persons might be expected to serve must depend on the density of population and the percentage seeking relief. I think that a large work should be expected to serve for villages within an area of 25 miles radius from the work, and I see no reason why people should not go 50. or 60 miles to a famine work if they go soon enough and before they are reduced in strength by fasting.

25.—Officers of the Public Works Department were supposed to be subordinate to the Civil authorities in all matters not strictly professional, but the way this was interpreted varied somewhat.

In the Belgaum District I was allowed a free hand, the Collector agreed with me and I with the Collector.

26.—A Civil Officer was appointed on each charge some time after the work had commenced.

In the works of which I have experience he was a clerk out of the Mámlatdár's or Collector's office. His salary was about Rs. 60 per mensem.

In matters relating to gratuitous relief on the works he was independent of the Public Works Department and took his orders from the Collector, Assistant Collector or Deputy Collector. In other matters he was subordinate to the officer in charge of the work.

His diary was submitted through the Executive Engineer to the Collector and Commissioner.

The Civil Officer was not generally capable of understanding the measurements, but he had every opportunity of seeing the measurements taken and reporting to the Executive Engineer if he thought there was anything amiss or mentioning it in his diary. But he had full authority to assure himself that the orders of Government were fully followed in all the matters mentioned at the end of paragraph 426 of the report of the Famine Commission of 1898. On the piece-work system he was expected to assist in the distribution of the gang earnings amongst the sub-gangs or numbers of the sub-gangs. Some of these Civil Officers being only accustomed to office work were unable to stand exposure to the sun for any length of time on the work and spent too much of their time in their huts.

27.—The Civil Officer could not form any opinion on such technical subjects as the classification of different kinds of material met with in excavation. This duty devolved on the Public Works officer in charge of the work, subject to the approval of the Executive Engineer.

28.—Gangs consisted of men, women and children, as they came on the work, and were grouped as far as possible into village gangs and family sub-gangs with very fair success both in Ahmedabad and Belgaum, where the piece-

work system was in force. There were generally about 40 workers in each gang under one ganger, sub-divided into four or five sub-gangs.

29.—On *piece-work* the classification was simply "men," "women," "working children" and "dependants." On *task work* the new classification was adopted of three classes of workers irrespective of sex, and a fourth class of nominally worked dependants or weak people.

30.—I think it is undesirable to complicate the calculation of tasks and rates by increasing the number of classes, and that three classes of workers is quite sufficient if the task-work system is adopted. I did not find any great difficulty result from the absence of distinction in the classification of men and women.

Financially also the resulting simplicity is a most important factor in economy; the simpler the classification the easier the tasking and the more efficiently will the tasking be done.

While the cost per unit depends on the wage scale, it depends much more on the cost of supervising establishment and efficiency of management, and in practice everything that tends to simplicity is economy.

31.—In Ahmedabad a start was made on one work with task-work and on another with the Bengal system of piece-work, without kitchens for the dependants. Soon limited piece-work was in force on all the works, the rates being adjusted to make the earnings sufficient for the dependants and to include a Sunday wage. A few people were unavoidably employed on the muster-roll system of task work, and the dependants of these were fed in the kitchen.

Those employed on task work were mostly feeble persons or those who came on to the work singly without friends or relatives; these were kept on task-work until they could be drafted into some of the piece-work gangs. In Belgaum famine works were throughout conducted on the piece-work system with a few special gangs on task-work.

32.—I consider that it is not proved that a system of payment by results is unsuited to conditions of actual distress and famine, if started in time. If the people do not come on the work in unmanageable rushes, and if they are not already too weak when they arrive, the piece-work system can, I think, be used with success and economy in actual famine, provided that the work is such that it tends itself to easy and accurate measurement, and that the work is properly set out beforehand.

If the work is overcrowded then the measurements may fall into confusion and recourse must be had to the muster-roll.

33.—I have not now got the table of tasks used by me at the commencement, but the tasks were a little higher than those subsequently sanctioned by Government and circulated for general adoption. There were three grades of tasks for the three classes of workers—"diggers," "carriers" and "working children."

34.—I believe that the scale of wages in force in the Famine of 1899-1900 was generally sufficient and for some castes who eat the flesh of dead animals the scale was liberal. The workers kept in good condition, although earning considerably less than the Code maximum and those that earned full wages were very well satisfied. I cannot prove that they saved but I think they did. I think it is right that they should save a little if they have to work at a distance from their homes.

35.—A rest-day wage was given for task workers, on piece-work the rate was adjusted so that the earn should include a rest-day wage. On task work I do think it matters whether the rest-day wage is added in sum at the end of the week or one-sixth of that wage a to daily wage; the amount paid will be the same at the of the week.

36.—I had little experience of the minimum wage, I know that when near their village workers will stay work and thrive when only drawing the minimum. Not but the pinch of hunger will drive some lazy worke work industriously; if they can get a subsistence by id and doing only half a day's work they seem to prefer to and eat less.

38.—In Ahmedabad the Revenue officials insisted daily payments being continued for a long time, bu Belgaum there was no difficulty about making we payments, and I learn that in Bijápur, where I am posted, the people preferred to be paid weekly.

39.—It was stated in Ahmedabad that the Banias w not advance grain and when daily payments were sto the people were given grain advances daily on a certifi signed by the Public Works Department subordinate, the system was very troublesome. In Sholápur in 1897 in Belgaum and Bijápur in 1900 I found and find no diffic in weekly payments.

40.—On piece-work payment was made nominally to gangers, but the money was actually distributed at the tim payment amongst the sub-gangs in the proportion of the turn of work done by each sub-gang.

Personally I think the piece-work system the sim and best when it is possible.

42.—The system of payments by results adopted like the Bengal system, but with a limit to the earnings. Belgaum, when kitchens were introduced, the depend were ordered to be fed in the kitchen and the rates were altered so as to limit the earnings to the Code maximum a rest-day wage.

Payment was made in small coin in the presence of whole gang and the sum divided there and then amongst sub-gangs, consisting of 7 or 8 members each, in proportio the outturn.

If the members of a sub-gang had any difficulty in tributing their share, the correct share of each man, wo and child was calculated and they were told what each sh receive for the week's work.

43.—See reply to Question 31.

44.—No contractors were employed.

45.—Muster-rolls of those on piece-work were not first kept up, but only the numbers of men, women children in each gang were counted daily and recorded. Af wards muster-rolls were ordered to be kept, but they were used as account documents, excepting in the case of the sp gangs employed on task work.

The system could be changed quickly from piece-wor task work without any hitch, if blank musters are kept re and there are sufficient kárkuns.

46.—A list of grain rates in force was received from Mámlatdár each week, based on the cheapest of the f grains available.

The grain rates were taken to the nearest pound per upee, and the piece-work rates to the nearest pice.

48.—The Superintending Engineer sanctioned my rates nd afterwards tables were circulated by Government of asks and piece-work rates for general adoption, and the Collector had no power in the matter.

Small Village Works.

59.—I am not in favour of any small work close to a illage; such work is no test of distress, it approaches to gratuitous relief. If it is a village tank the village is benefited and some money is spent in the village, but some of t goes to those not in need of relief.

General.

92.—If the works are not too close to towns or within 12 or 15 miles of the relief workers' village, then the tests are sufficient.

93.—I should like to enforce a distance test of 15 miles at east. I should like to prevent men from sending all their women-folk on to the work while they themselves remain at home, which causes an excess of women on the work and reduces the outturn of work by the gang.

A. W. SHEPARD,
Executive Engineer, Bijápur District.

1303

Report by Mr. G. Monteath, I.C.S., Assistant Collector, Thána, with reference to question No. 66 put by the Famine Commission.

No. 127, dated 28th January 1901.

From—G. MONTEATH, Esq., I.C.S., Assistant Collector, Pránt Bhiwndi;

To—The Chief Secretary to Government, Famine Department.

I have the honour, by direction of the Commissioner, N. D., to submit the following report with reference to No. 66 of the Famine Commission's questions.

2. It was decided in September or October last to send a certain number of cattle from the affected districts of Gujarát, where fodder had failed, to the Thána District, for grazing in specified areas of Government forest during the dry weather. By the end of November, some 15,000 head of cattle had been sent to Pálghar and Dáhánu Stations and drafted thence to forest areas in the Dáhánu, Wáda and Bhiwndi Tálukas.

3. I was not in charge of those sent to Dáhánu during a considerable part of the time they were in the district. As about 11,000 head were sent to Pálghar and only 4,000 or so to Dáhánu, and as both lots fared about the same, I imagine it will be sufficient for the purposes of this report if I give details regarding the former only, of which I was in charge from first to last.

4. 10,267 head arrived at the grazing areas upwards of 30 miles from Pálghar, the rest having died on the way owing to their weak condition, or strayed, generally because their attendants had deserted them. Of these 6,604 were from Broach, 2,512 from Ahmedabad, 764 from the Panch Mahális and 387 from Kaira. The Broach cattle were chiefly bullocks in charge of owners or their servants, those from the other districts mostly cows and calves, in charge of Rabáris and Bharwáds. There were some buffaloes also from each district.

5. When they arrived the Broach cattle were, generally speaking, in fairly good condition. The others were mostly in poor or bad condition.

6. The death-rate was large from the beginning. Of about 7,000 in the week ending on November 5th, 117 died: in that ending November 12th, 165. Up to November 24th, by which time all the cattle (10,267) had arrived at the grazing areas, there were 379 deaths. Many of these deaths at the beginning resulted from surfeit—animals in weak condition eating and drinking more than they could stand as soon as they found food and water abundant.

7. At the end of November, however, rinderpest appeared in one area in the north of Wáda. It was contracted no doubt from the village cattle among which it had been, and continued to be, rife. There is no reason to believe that the disease was imported from Gujarát. In spite of all the measures taken —segregation, shifting of the herds, and splitting them up into smaller ones— it continued till March by which time 3,900 cattle had died, appearing or increasing in one area as it decreased or disappeared in another. Foot and mouth disease was also rife for some time, aggravated no doubt by the nature of the ground to which the cattle were unaccustomed.

8. Till the beginning of the hot weather those cattle which were not affected by disease kept fairly good condition, the Broach cattle remaining the best. After the beginning of the hot weather, however, the state of things was changed. Though disease had disappeared mortality continued. The Broach cattle lost their condition rapidly and very soon the survivors amongst them

presented a wretched appearance. The Rabáris' and Bharwáds' cattle on the other hand stood the hot weather better, though they had arrived in much worse condition. The Panch Maháls cattle on the whole fared best through the hot weather.

9. The mortality figures were pretty much the same, averaging about 200 each week from the beginning. They fluctuated a little with the spread and decrease of rinderpest, but on the whole may be said to have remained pretty constant—some 200 a week to the end—though rinderpest disappeared in the beginning of March. That is to say, of course, the percentage of mortality increased every week. Finally, 1,202 head were sent back by rail—541 to Ahmedabad, 325 to Broach, 40 to Kaira and 296 to the Panch Maháls. But 3,964 head had already been returned from time to time to the owners who came for them. These were mostly Broach cattle. That is, of the 10 267 head which reached the grazing grounds, 5,166 were returned. I cannot say how many of these survived ultimately. Judging by their condition when they went I am afraid a good many must have died. A certain number of cattle were sold in the district by permission—not enough however to make it necessary to take count of them here.

10. The Dáhánu cattle, 4,000 odd of which arrived at the grazing grounds in that táluka, fared much the same. They suffered likewise from rinderpest and foot and mouth and stood the hot weather no better. The percentage of mortality was higher amongst these than among the others, but they had started in worse condition. Roughly, 400 head were finally sent back by rail. A number had already been returned to their owners. I may say counting these some 1,500 were returned in all, but I have not figures from the beginning of those returned to owners who came for them.

11. Water and grazing were sufficient throughout. Owing to an apprehension that grazing might be insufficient in the hot weather some 12 lákhs of pounds of grass, to which all the cattle had access, had been cut and stacked at different places in the grazing areas as well as along the route back to the railway station by January. Water never failed up to the end. A good deal of the grass remained uneaten. The cattle did not absolutely refuse to eat it, but appeared unable to assimilate it. They could have disposed of twice the amount if they had had any appetite for it. Moving them from one part of the táluka to another was of no avail to stop the mortality.

12. The reason why the Broach cattle fared rather worse than the others in the hot weather is, I take it, that they had been from the first unaccustomed to roughing it. They were nearly all bullocks and buffaloes belonging more or less to well-to-do owners—Boráhs chiefly. They were unused to moving about and sleeping in the open to any extent, and I gathered that they were accustomed at sometimes at any rate during the year to be hand-fed. I do not think the fact that their herdsmen deserted them wholesale almost at the beginning of things made very much difference to them. The Rabáris' cattle on the other hand were hardier from their wandering life. But all were unable to withstand the effects of an entirely different climate, different grazing, and different ground from those to which they had been accustomed in Gujarát. That the Panch Maháls cattle did slightly—but only slightly—better in the hot weather may perhaps be due to their having seen country a little less different from the Thána District than the others.

13. Of 208 head sent to Ráo Bahádur Appáji Ganesh Dándekar, 138 were returned. These cattle did a shade better than those sent to the jungles, possibly because the grazing grounds of the coast patti are (or seem to me) rather more like those of Gujarát. Of 1,000 head or so sent by two Mahájans of the Ahmedabad District, without reference to the Government undertaking, so far as I know, hardly one survived.

14. I have given only a few figures. I gathered from the wording of Mr. Lely's order that it was not required of me to give lists of figures.

1305

Mr. G. Carmichael, I.C.S.

Answers by Mr. G. Carmichael, I.C.S., to the questions drawn up by the Famine Commission.

Introduction.

1. The district was affected by the famine of 1896-1897, but not severely. In that year the early rains were sufficient and continued long enough to allow of a crop being raised on the normal kharif area. The early cessation of the rain reduced the kharif outturn and largely reduced the area of rabi sowings. The kharif crop is, however, the largest and most important one. The rains of 1897 were late and only a very moderate harvest was reaped. The harvest of 1898 was quite up to the normal.

The cultivating classes are, generally speaking, well-to-do. It may be said that they are too dependant on cotton which is largely grown and has not been so profitable in late years as it used to be. The district contains a large number of labourers who live from hand to mouth, and it is from their ranks that the relief works are largely filled when the stress of famine begins to be felt. It also embraces a large aboriginal community including Bhils who are scattered throughout the plain villages and live mostly as labourers, Bhils who have been encouraged to settle down in the plains to permanent cultivation, and lastly their wilder brethren who raise crops here and there in the wilder parts of the district.

2. I have not with me the figures of the kharif sowings in 1899. Possibly they may not have been much below normal, for many sowed in hope of better rain and sometimes cotton is sown before rain falls at all. Some of the seed then sown is said to have germinated after rain fell in 1900. The resulting kharif crop was of the poorest. Cotton yielded from one to two annas. The grain crops were stunted and yielded little or no grain. Rain in September gave rather a better return in parts of the west and south of the district, but even so the most valuable product was the straw sold as fodder.

3. The average rainfall may be taken as 25 inches. In 1899 the actual fall was from 8 to 10 inches. The bulk of it fell at the end of June and beginning of July. In September there was a further fall, but in all except a few places it was not sufficient to produce any marked improvement in the situation, and thereafter till the middle of November the conditions prevailing were similar to those of the hot weather.

In an average year the rains begin towards the end of June and continue throughout July into August, when there is a break. Five or six inches are expected in September and two or three in October.

4. I have not the data on which to form an estimate.

5. Ditto ditto ditto.

6 to 9. Omitted as I was not in Khandesh at the commencement of the famine.

10. The programme contemplated large relief works as the backbone of the relief system. There was no provision at the beginning for village works.

11. Of the measures noted the first to be adopted was the opening of the Government forests. Then followed the test works which were not provided with kitchens. After a short period they were converted into regular relief works with kitchens for dependants. The general distribution of dole was then begun, and when it was found inadequate for the relief of destitute wanderers, poorhouses were opened. Arrangements to organize private charity in towns were made at the time the general distribution of the dole began. Lastly, arrangements were made in some places to give the dole in the form of cooked food.

12. As soon as it became evident that famine was impending the ordinary Circle Inspectors were directed to carry on the duties imposed on them by the Famine Code. They were constantly moving about their charges and submitted regular reports and brought to the notice of the Taluka officer any cases in which they considered the grant of dole necessary before the general distribution was begun.

To cope with the work involved by the general distribution of the dole and to secure a closer watch over the condition of the people the number of Circle Inspectors was increased so as to allow of every village being visited at frequent intervals not longer than a fortnight, mostly always a week. The circles were redistributed between the permanent and temporary Inspectors and the work begun by the end of December.

Over the Inspectors were appointed Special Aval-kárkuns, one in each taluka and petha. They began work at the beginning of February. Their duty was to supervise the dole lists and distribution and to assist the Mámlatdárs in the work of receiving and inquiring into applications for loans.

13. Loans were issued at the outset from the ordinary allotment for the year, which, excepting a small amount advanced for seed at the commencement of the rain, was available in full. A further allotment was applied for and obtained. I do not remember the exact amount advanced.

The loans were granted under the Land Improvement Act for the deepening and repair of existing wells or for the construction of new ones. Security was required in the ordinary way, *i.e.*, by mortgage over the holding or part of it, and a condition was imposed that the work should be carried out within a specified time, which, if water was reached, would allow of a crop being raised in the course of the hot weather. As far as I remember, there was no condition that a certain

number of labourers should be employed. In the Belgaum District an attempt was made to enforce such a condition, but I left that district before the practical working of the scheme was known.

The loans were granted to cultivators who were in a position to give security. They were made recoverable in full under the ordinary conditions.

14. Except in the villages on the high banks of the Tápti, irrigation wells are feasible all over the plains in Khandesh. They are especially easy to make in the tract north of the Tápti, which is traversed by the perennial streams flowing from the Sátpuda range. For the basin between the Sátpuda and the Tápti I would estimate the average depth of water below the surface at the end of the rains of 1899 at from 15 to 20 feet and elsewhere at 25 to 30 feet. This is only a rough estimate based on the casual inspection of the wells I looked at during my tour.

The digging of wells was encouraged by loans. I think a much larger allotment might have been spent with advantage as it would have relieved the strain at the beginning. On account of the extension of cotton cultivation many of the old wells had fallen into disrepair, and at the beginning of the famine the want of irrigated plots of land was severely felt. Tagái loans helped to remove the difficulty and a considerable number of new wells were dug which could not be financed out of the allotment.

The repair of old wells and the construction of new ones carried out with the aid of, or in the hope of, getting tagái loans were chiefly useful as a means of raising sweet potatoes for food and sale and fodder for plough cattle. Sweet potatoes were grown to a much larger extent than usual and were sold in large quantities at all the famine camps.

Many of the wells were dug in haste and used before they were properly built up. A proportion of these will in all probability be allowed to fall into disrepair. The balance are of the nature of a permanent improvement, but the comparative immunity from famine which Khandesh enjoys and the preference for cotton cultivation may operate to make the people forget their hard experience and give up these wells.

As a measure for the employment of labour it is difficult to estimate the effect of the loans, especially as the allotment was small compared to the size of the district. The loans were given in small sums and the work was carried out sometimes by the cultivator's family alone, sometimes with the assistance of four or five labourers. They are an important aid to prevent the class of small cultivators being reduced to come on to relief works. It gives them enough to pull through with, and as it is a loan and not a gift they preserve their self-respect.

15. The works just undertaken consisted of preparing metal for district Local Board roads.

As the work had to be concentrated in order to be supervised, it was not what would have been carried out on the roads had the season been normal.

The work was conducted under the supervision of the Executive Engineer and his staff.

16 to 18. Omitted, as my information being gathered subsequently may be incorrect.

19. The test works which were open were converted into regular relief works. They and the new regular relief works first opened consisted entirely of large public works.

20. The road works were under the control of the Executive Engineer, and the irrigation works of the Executive Engineer for Irrigation. An additional Executive Engineer was posted to the district in December and ultimately the works were divided into three charges irrespective of their nature. The supervising establishment was larger than it was ever anticipated would be required and had to be collected hurriedly. There was no delay in opening works, but at the start there was a heavy rush of applicants for admission and the supply of tools could not keep pace with the requirements. No applicants were refused, and the temporary shortage of tools probably attracted some who would not have come had they had to work.

21. In charge of each camp was put a Public Works Department official usually of the grade of Overseer or Sub-Overseer, in some cases of the grade of Supervisor or Sub-Engineer. Above the officer posted to the camp came a Supervisor or Sub-Engineer with two and occasionally three camps in his charge. Over him was placed an Assistant Engineer with a charge of from two to four camps.

No definite maximum was laid down as the limit of a charge. Such a course was impossible when the Public Works Department establishment of trained men was so inadequate at the commencement. The deficiency was gradually made up as the season progressed and then the unwieldy camps were broken up and distributed in a number of smaller camps. The two largest camps were one of 20,000 workers, which was sub-divided in February, and one of over 30,000, which was finally sub-divided in March. Thenceforward the majority of the camps were under 10,000, though one or two ran up to 14,000 or 15,000.

In sub-dividing the large camps employment was found for the workers by opening smaller works at places within a short distance of the camp that was broken up. The move was not in any case more than ten miles.

22. Each camp had its own establishment.

As a general rule there was a Supervisor in charge of every two camps or of one camp if it was a large one. At each camp there was an Overseer or Sub-Overseer.

Under the Overseer there were *one store-keeper* and *four to eight maistries* to assist in laying out the tasks and in measuring up.

Mustering Kárkuns.—One for every four gangs of fifty with a head kárkun over every four or five kárkuns. One of the mus ering kárkuns was in charge of the conservancy gang which removed all filth and rubbish from the camp and in times of epidemic searched the camp for cases of sickness.

Cashiers.—One for every 2,000 workers.

The other establishment, watchmen, water-drawers, etc., were drawn from the relief workers.

A police guard of a Naik and three Constables was appointed for every main camp.

When officers of the Native Army were made available they were put specially in charge of the conservancy and of the supervision of the bázárs. One or two of the best were given more extended authority.

Each camp had a Civil Officer or a Superintendent working under the Civil Officer of a neighbouring camp. Under them the following establishment was entertained :—

1 Store-keeper.

1 Kárkun and peon.

1 Mustering kárkun for every 200 persons in the kitchen.

Kitchen servants drawn from the workers including cooks, nurses for the children, watchmen, gate-keepers, water-carriers and wood-hewers.

The arrangements for hutting and sheltering the people, for conservancy and sanitation, for water-supply, for food supply and for medical conveniences and supervision were those laid down in the Famine Code. The selection of the camp sites depended on the facilities the sites offered for obtaining a good supply of water. The wells were dug and the camp and latrines laid out before the work was thrown open. There was little difficulty in obtaining a supply of food. The Revenue officers of the táluka arranged with the grain dealers to open a bázár and to supply the kitchen. The proposal to open the camps was intimated to the Surgeon General, who arranged for the despatch of medical stores and for the posting of a medical officer.

The provision of hutting was not made an indispensable preliminary to the opening of a work. The materials required for the kitchen and hospitals were obtained as quickly as possible and then materials for the workers' shelters. When the work was well in hand, say, from January, no new camp was opened without kitchen and hospital shelters and huts for a proportion of the workers being ready beforehand.

23. Admission was free to all persons ready to submit to the labour test. No system of selection by tickets or otherwise was tried at the commencement. No distance test was insisted on, and during the cold weather residence on the works was not compulsory. Residence was made compulsory in March, when the nights were no longer cold.

24. In a severe famine two camps of 5,000 workers each *plus* dependants would in my opinion suffice for the revenue division constituted by a táluka, say, of 500 to 600 square miles in area with a population of 80,000 to 100,000.

During the famine of 1899-1900 the distribution of workers in Khandesh was very irregular. The first test works were opened in the centre of the district and in East Khandesh. In East Khandesh numbers were attracted from Hyderabad and the Berars. The Berars people gradually returned to their own homes. In the centre of the district the majority were from Khandesh itself. The numbers then continued abnormally high until the end. It was not that this portion of the district was more severely affected than the rest of the district, but because as I believe the people having once been gathered these did not choose to move to a new work when one was opened nearer their homes. The first test work at Vanjari attracted workers from villages forty or fifty miles away. In March I found that villagers from distant villages who had gone to Vanjari when it was just opened were still on the works in its neighbourhood. At the beginning of the rains workers were frequently to be met travelling twenty or thirty miles to their homes. On the other hand, workers who were dispersed from a camp by an outbreak of cholera were very averse to going far from their homes again. Much depends on the energy and self-reliance of individuals. Those of a low grade of intellect will take no trouble but prefer to loaf about and take their chance of what private charity may come in their way.

25. The officers of the Public Works Department were subordinate to the Civil Department in every matter of importance affecting the method of relief. It may, however, be remarked in this connection that the prescribing of the standard task being a technical matter rested with the Public Works Department.

26. There was a Civil officer for every charge except at one small irrigation work which was in progress till May.

The Civil officers were drawn from the establishments of the Revenue, Judicial and Local Board officers in the district. Their salary was ordinarily R50 except in one or two special cases in which from R60 to R80 was paid. The Civil officer was subordinate to the officer in charge of the relief work who was either an Assistant Engineer or a Sub-Engineer or a Supervisor. He was not subordinate to the Public Works Department officer in charge of the particular camp under the officer in charge of the work.

The Civil officer had the authority specified in the second paragraph of the question. The difficulty experienced was not want of authority but want of time or energy on the part of the Civil officer to attend to all his multifarious duties. The arrangement by which the Civil officer was subordinate to the officer in charge of the work and the

number of Civil officers' posts to be filled made it difficult to obtain the proper type of officer who could be depended on to exercise the authority with discretion. The Civil officers had their hands full in maintaning their large kitchens and, until they were relieved of this part of their work by officers of the Native Army, in looking after the health and cleanliness of the camp. They provided for new comers and saw that such as were able to work were punctually employed. They were present when payments were made and brought to notice any serious irregularity or unpunctuality in payment. They revised the classification of the gangs particularly with regard to the un-authorized inclusion therein of children too young for work. Beyond the above they rarely exercised any authority. Their position took away much of their initiative even had they had the necessary energy and influence which many of them had not.

27. Variations from the standard task on account of local conditions were ordered by the Public Works Department officers and not by the Civil officer.

28. The gangs were made up by the Public Works Department officers. The standard number was 50. On metal-breaking work the system of individual tasking was in force and the workers were ganged according to caste, sex and class and not by families or villages. The women and children of a family would be in one gang, while the able-bodied males were ganged separately at the quarries. On earthwork the gangs were arranged by families and castes.

29. The following classification and wage scale was adopted:—

Special Class (mukádams, etc.)—25 per cent. above the maximum wage.

Class I.—Able-bodied up to the standard of professional labourers—maximum wage 19 chataks.

Class II.—Able-bodied but not up to the standard of professional labourers—maximum wage 15 chataks.

Class III.—Children over 8—wage 9 chataks.

Class IV (1).—Nominally worked without prescribed task—wage 12 chataks.

So far as I remember the classification and wage scale is a close approximation to what was laid down by the Famine Commission. With the wage worked out in cash to the nearest pice there would be little or no difference.

30. The absence of any distinction between male and female workers did not lead to any difficulty. My experience was that the men seemed to keep in rather better condition than the women. This may have been due to the fact that the family earnings, including those of the children, are in most cases poorest and the men probably obtain a

share of the food larger than in proportion to what they earned. If this is what happened it would be an argument for a return to the previous differentiation of the sexes, but it is necessarily altogether a matter of conjecture. Many other causes may have operated.

In its financial aspect the question depends on the proportion existing between male and female workers. In Class I females were rare. Class II females much outnumbered Class II males. A saving would therefore be effected if the Class II female wage were brought below 15 chataks and the Class II male wage raised above it.

31. When the test works were converted into regular relief works the Code system was at once introduced. The system of payment by results was not carried on simultaneously with the Code system except when we were in the process of changing from the one system to the other at the close of the famine.

32. I had no experience of a work carried on during acute distress on the system of payment by results.

That works on this system should be started in time is essential, but this would not prevent the arrival late in the season of persons in such a condition as to be unfit for anything but the Code system. The number of such persons would in all probability be large under any condition of the employment of famine labour. To be successful the system would require a thoroughly practised and reliable establishment. With the emergency establishment which was necessarily our only resource in many of our works during last famine it would have resulted in a complete faliure.

Kitchens for children and dependants could not be dispensed with under the system of payment by results.

33. At the outset the tasks adopted for metal-breaking was—

Class I	. .	4½ cubic feet.
Class II	. .	3 „
Class III	. .	1½ „

I do not remember the details of the earthwork and carrying tasks. The taks was graduated according to the class of workers. No allowance was made for the distance the workers had to come.

The standard task was revised, I think, in April and the metal-breaking task increased to 8 cubic feet, 6 cubic feet and 4 cubic feet for Classes I, II and III. This was found to be too high and was reduced soon after to—

Class I	. .	6 cubic feet.
Class II	. .	4½ „
Class III	. .	3 „

For the hill tribes a reduction of 25 per cent. on the standard was allowed in March.

The standard task was followed when the stone was moderately brittle and broke into easily broken

chips. When the stone was hard and did not break into flat chips a reduction was allowed.

The raising of the standard was general. I do not know what were the circumstances that led up to the change.

34. My experience is that the Code wages are quite adequate. I am inclined to think that they are more liberal than is absolutely necessary. My reason is that on many works Class II workers continued in good condition with a wage varying between the Code minimum and the penal minimum. The numbers of Class II workers who earned full wage on metal-breaking was always inconsiderable. The majority earned only the Code minimum. I have compared such camps within a short space of time with a large earthwork camp. The workers were drawn from the same area and class of people and though on the earthwork many were earning the full and the intermediate wage and very few less than the Code minimum, it could not be noticed that the people were in any way in better condition than on the other camps. There was no restriction on the admission to the earthwork. In fact it never quite filled up to the limit as expected.

I have no evidence to offer regarding savings effected out of the workers' earnings. Some instances were reported on information given by the people themselves, but their diet at the time consisted largely of beef which was not always obtainable. All that it amounted to was that for the moment they were living in a better style than they were accustomed to in the hot weather.

Copper coin returned freely to the Banias on the works. The cashiers never had much difficulty in collecting the supply except in the case of one work for the aborigines who were paid daily. There the cashiers had occasionally to be aided with a supply from the treasury.

35. A rest-day wage was given by adding to the weekly wage one-sixth of the minimum wage for every working day on which the worker was present on the works during the week. The amounts were calculated by a ready reckoner and the system worked smoothly. It appeared to me a very satisfactory method.

36. In my opinion where works have been started in good time and when nothing has occurred (such as the dispersal of a camp by cholera) to keep the people from coming freely on the work it would be quite safe to work with a minimum even lower than the Code minimum. But in calculating the wage in actual practice it would be difficult to draw a line anywhere below the Code minimum and above the penal minimum. The penal wage is certainly not sufficient to enable workers who have physically deteriorated to recover condition. Such people would get full wages for the first week or fortnight after arrival, but they require at least the Code minimum for some weeks longer. I would not therefore recommend a further lowering of the Code minimum.

37. The minimum wage was allowed at the outset. The penal wage was introduced at the end of January. There was a tendency on metal-breaking works to fine down to it even with individual tasking. In some camps it became at times the general wage. I attribute this almost altogether to defective supervision. When the subordinate staff were kept up to their work, the workers did a larger proportion of their task and were paid accordingly. The workers require to be coaxed or driven to exert themselves. Hunger is not of itself a sufficient incentive especially if as on metal-breaking works the sedentary nature of the occupation offers great inducements to idleness. If the mustering kárkuns fail to appear punctually on the work to take the roll call and then disappear till the evening, the workers come late and idle away the working hours. In a slackly managed camp the roll call would be taken after the arrival of the latest comer, the entries of the individual tasks done would be fudged, to save trouble every worker would be marked as having done the same task, and as the total work done would be considerably less than the standard the whole gang received the penal wage. Individual effort was thus not recognised and those who might have exerted themselves relapsed into the lazy habits of the rest of the gang. The penal wage thus came to be looked on as the highest amount that could be earned and it was a difficult task to eradicate this impression and put matters on a proper footing again. With gang tasking the result was the same. The outturn per individual tended to equal that of the laziest member of the gang. Individual tasking for metal-breaking was adopted soon after the penal wage rule was introduced. On earthwork there was less opportunity for idling and whether this was the reason or not penal fining there was less frequent. This, however, did not make the earthworks more popular.

The workers did not appear to lose condition under the penal wage, and a considerable number were content to remain on it without any excuse for their so doing up to the end.

38. Payments were made once a week except for new comers arriving in a destitute condition, and for the aborigines who were paid daily.

Weekly payments are, I consider, sufficient in the case of ordinary workers. As regards the practicability of paying every one daily, much would depend on the establishment available. The number of cashiers and police guards would have to be largely increased. It would interfere considerably with the day's work of the gangs if they had to be mustered for payment every day. The clerical work of the officer in charge of the camp would be largely augmented. For large camps the matter of obtaining a sufficient supply of copper coin daily would be one of some difficulty.

39. New comers who arrived in a destitute condition were registered for daily payments. This was the only system that was found to work smoothly.

At first chits on the Bania were given to new comers by the Civil officer. This led to complications when worked on a large scale. The Civil officers were apt to be afraid that they would have to pay for the chits if there was any hitch about payment, *e.g.*, when the recipient left the work without earning enough to cover the chit. The result was that they were too chary of their chits. At one camp a serious abuse arose through the Banias giving much less than the full value of the chits and the people left the work with what they got.

There is no doubt that the want of some kind of a daily advance or payment *in cash* to new comers does tend to throw them seriously in debt to the Bania, or to keep them off the work altogether.

40. Payment was always made to the individual and not by gangs through the headmen. This was arranged for even with the piece-work system that was adopted towards the close. Payments in lump tc the gang would not have worked at all.

41. I have no figures. A proportion of the workers were content with the penal wage up to the end. In their case the practical result was that it became a kind of gratuitous relief for which they did only a very small amount of work.

42. A system of payment by results was introduced towards the end of the famine when there was evidence that there was a demand for agricultural labour. On metal-breaking works it was simply a modification of the previously existing system with this difference that there was no limit to the fining. Individual tasking was continued and a ready reckoner was compiled graduating the amount of the wage in proportion to the amount of the task done.

43. At first the system was applied only to Class I and Class II workers. The nominally worked were paid at Code rates for their nominal task. The weakly members of Class II gangs were ganged separately and paid as before. Kitchens were maintained for children and dependants and the piece workers thus could earn nothing more than is allowed by the Code for individual workers.

Towards the end when the works had contracted largely the maximum wage was raised by 20 per cent. in order to allow of the workers maintaining their dependants, whether they belonged to the nominally worked or were fed in the kitchen. The nominally worked were thereafter struck off work and the kitchens closed to all except those in bad condition.

The system of giving piece-work at favourable rates to Class IV (*1*). The nominally worked was never tried. I am inclined to think that giving them work with a minimum wage is safer and better.

44. Contractors were not employed at any stage.

45. Under the system of payment by results muster rolls were kept up and it was possible at any time to re-introduce the Code system without any delay.

46. The prices scale for the calculation of wages was fixed by the Local Government. The rate for the week for any particular work was certified by the Mámlatdár in charge of the Revenue division in which the work was situated. He had orders to ascertain the price personally or by deputing a trustworthy subordinate. The prices were those prevailing at the bazár to which the majority of the workers resorted. It might be the bazár at the camp or in a neighbouring town or village. The kind of grain was jowári of the sort used by the common people—jowári of the second sort, not the very best. For the camps in the west where the workers belonged to the aboriginal tribes rice was taken as the standard.

The scale neglects variations less than one pound per rupee. In practice fractions were neglected and the nearest pound taken, *e.g.*, 16¼lbs. per Re. 1 would be taken as 16lbs. and 16¾ as 17 lbs. per Re. 1.

47. In preparing for the opening of a relief work the first step to be taken was to find a suitable site near the work where a sufficient supply of water could be obtained. The wells it was proposed to use were cleaned out or new shallow wells dug. The wells were then fenced off and iron buckets provided for drawing water. The plan of the camp was then marked out locating the various blocks for the workers' shelters, the quarters for the staff, the kitchen with shelters for the kitchen inmates, dispensary and hospital sheds, bazár, latrines and burial ground. Of the sheds the store-houses, kitchen and hospital sheds with quarters for the staff came first in the matter of urgency. When they were ready and the wells dug and tools in store the admission of applicants began. As the workers arrived they trenched out the blocks that had been lined out, prepared the working stances and opened the quarries. Gangs were put on at the same time to put up the workers' shelters.

The tools and plant were obtained by the Executive Engineer who got them either from Bombay or had them made at a central workshop which he organized at Dhulia. From Dhulia the tools and plant were sent out to the Assistant or Sub-Engineers who kept a central store from which the subsidiary store at each work in their charge was kept supplied.

The revenue officer of the táluka was ordered to arrange for the opening of a bazár at the camp and to assist the Civil officer in obtaining the supplies required for the kitchen.

Applicants for admission were assembled at a fixed point marked by a flag near the kitchen. The Civil officer had a list made of their names and villages and through the camp kárkun

assigned them a place of residence in the camp. The children, dependants and those arriving in a weakly condition were then admitted into the kitchen, while the others were sent on to the Public Works Department overseer in charge of a watchman with the list of their names, addresses and classification. The overseer arranged the new arrivals into gangs, appointing mukádams and kárkuns. The kárkun after mustering his charge took them to the store-keeper with an order for tools. When the tools were received the maistri under the orders of the overseer allotted a site for the gangs on the works.

On metal-breaking works the gangs were supplied with metal or wooden measures which contained $1\frac{1}{2}$ or 3 cubic feet of broken metal. A standard heap of metal showing the amount of the day's task was in many cases placed in front of the gang. The roll call was taken once in the morning and again after the midday rest. As each worker completed enough to fill one of the measures or at the close of the day his work was measured and the number of measures completed was marked by small strokes above the attendance mark. The strokes were totalled at the end of the week and the total for the gang was then checked by the actual measurements taken by the overseer of the combined heap of metal. The wage payable to each worker was then calculated on the basis of the outturn of work shown in the muster roll—full wage if he had completed the required number of measures, the intermediate wage if he had done within 75 per cent. of it, the minimum wage for over 50 per cent. and under 75 per cent., and the penal wage for anything under 50 per cent. To this was added the rest-day allowance of one-sixth of the minimum wage for every day he had been at work.

When the wage for each had been thus calculated at the certified grain rate and entered in the muster roll the rolls were made over to the cashier for payment. The week's work ended on Wednesday and the cashier usually began payment on Friday afternoon and had it completed by Sunday. On work days a convenient place near the working stances was chosen and the gangs called up one by one with their mukádams and kárkuns. Each individual was then called up and the amount of his wage handed to him. The Civil officer or the overseer or the officer of the Native Army, if there was one, was expected to be present to witness all payments.

Children under 8, adult dependants who were unfit for work, workers temporarily unfit for work and infirm destitutes who had no supporters on the work were fed in the kitchen. Cash payments to dependants were made with the sanction of the Commissioner on one small work which was not expected to last long and in a few special cases without his sanction, when a small temporary camp was maintained either to clear up after a large

camp had been moved or to prepare the site for a new camp.

All persons fed in the kitchen were expected to come or be brought by their relatives and to remain in the shelters provided for them throughout the day. The children were put in the charge of nurses: food was distributed twice a day—half the ration in the morning and half in the afternoon. The only persons who were not required to remain in the kitchen were children who were considered too young to be separated from their mothers. In such cases the mothers either brought the children to the kitchen and were then allowed to carry away the cooked ration, or the food was sent out and distributed on the work. The latter method was so often abused that it was discontinued wherever it could be done without hardship.

To conserve the water-supply the well or reservoir was fenced off and only the water-drawers specially appointed for the purpose were allowed inside the fence. They were supplied with iron buckets with which they drew water and filled the pots of the workers set down outside the fence. The wells in most camps did not require disinfection with permanganate. The difficulty was to prevent the use of an unauthorized supply if there was any within reach.

The hospital accommodation consisted of the Medical Officer's quarters with dispensary room, and two to three large sheds with supplementary raotis as required. For cholera and small-pox cases separate raotis located at a safe distance were almost always used. The proposal to open the camp was notified to the Surgeon General, who despatched through the Civil Surgeon a supply of medical stores and appointed the Medical Officer. The Medical Officer had an imprest of Rs. 25 from the Public Works Department, to be recouped on bills countersigned by the Sanitary Commissioner. This was an inconvenient practice as it involved a long delay in recoupment after any expenditure. The most convenient method, and that usually followed, was for the hospital rations to be supplied from the Civil Officer's kitchens and for the Medical Officer to obtain such essentials as cots and blankets through the Civil Officer with the assistance of the Mámlatdár.

48. The standard task was fixed by Government in the Public Works Department. It was varied to meet local conditions, such as hardness of the stone, etc., by the local Public Works Department officers. A reference was made for a reduction of the task in favour of the aborigines and the proposal was sanctioned. I had no occasion to make any other reference. The Collector had power to suspend penal fining at any camp.

51. No. Except the small works for the improvement of water-supply no small village works were started.

Special Relief.

60. The hills on the north of the district and the hilly and jungle covered tracts in the west are

populated by aboriginal tribes. In many of the villages in the open plains there are small communities of Bhils. The latter are more accustomed than are their congeners on the hills to earn their living as ordinary labourers, and they came on the ordinary relief works pretty freely. They were to be found on nearly all the works in the centre and east of the district. Some of them worked well, but as a class they were very lazy. No special tests were applied to them.

The wilder aborigines came on to four works which were open in their neighbourhood.

These were :—

(1) In Pimpalner Táluka open from December till the close.

(2) One in Navápur Petha open from January till the close.

(3) One in Taloda Táluka on the Nándurbar-Taloda road. Moved after an outbreak of cholera and located in two camps on the Shaháda-Taloda road. Combined at the beginning of the rains into one camp which was open till the close.

(4) One in Shirpur Táluka.

At works Nos. 2 and 3 the whole of the workers were aborigines from the jungle villages. On work No. 2 they were Maochis and on work No. 3 Bhils proper and Pavras. On all the above works the aborigines were exempted from the penal wage, their task was reduced by 25 per cent. and daily payments were made. Even so they were very backward in applying for relief and their reluctance was intensified by severe outbreaks of cholera at all the camps.

61. The Government forest operations consisted in the collection and pressing of 120 lakhs of pounds of grass in the centre of the most affected tract. The operations commenced at the end of November and continued till March. The labour employed in collecting the grass, and with a few exceptions in pressing it, was taken from the Maochi inhabitants in the neighbourhood. They came forward willingly for this kind of work and rendered excellent service. The Collectors of Surat and Broach had grass collected independently for their own districts in the extreme west of Khandesh, but still larger quantity than all the Government collections put together was collected by private contractors. These operations must have brought a considerable quantity of money to the grass-collecting labourers, but they came to a close just as the hot weather was beginning. From the Dangs besides grass a large quantity of bamboos were extracted, the contractors were encouraged by remission of the Government Royalty to extend their operations and when they stopped it was arranged that the Government officers should purchase head-loads of bamboos at certain depôts.

Much of the hutting material (bamboos, posts, rafters, etc.) for the camps in the district were extracted from the forests in the Bhil country.

A work of forest demarcation was open in the Taloda and Shaháda Tálukas. The work consisted in digging a shallow trench along the boundary between the Forest proper and the uncleared revenue land. Work was opened at four places along a lengthy line; it was carried out under the supervision of the Range Forest officers in charge of the two ranges. Liberal rates with daily payments were given, but though the work passed close by the forest villages, the numbers, who came forward for employment, were not so great as was expected.

When the rains fell the Tápti Valley Railway provided employment for a considerable number on the work of consolidating the embankments along the new line.

63. No works of private utility were undertaken.

The above forms of employment that were offered did not meet the case of all and the distress prevailing necessitated a very liberal distribution of the dole, the establishment of poor-houses, the opening of cheap grain shops, and the grant of loans to some of the larger cultivators, among them who would not accept any other form of relief.

63. In Khandesh the weaving centres are Sávda and Faizpur in the east and Pimprála, Párola and Dhulia in the centre. The Sávda Municipality undertook special relief of the weavers in Sávda and Faizpur successfully, but the operations were not on a large scale. From the other towns the weavers went on the ordinary relief works without hesitation. An inspection of the weavers' quarters in Párola in April showed that nearly all had gone to the relief works in the neighbourhood. The only ones who remained were a few old men and some workers at a special class of goods. Relief was afforded to such in Dhulia, Párola and Pimprála employing them in turning out the clothing to be given in charity out of the Relief Fund.

64. The weavers did not show any reluctance to go on the ordinary relief works except those who worked at a superior class of goods.

65. I do not think that in Khandesh any further special measures than were undertaken for the relief of weavers were necessary.

66 and 67. The measures taken to prevent mortality among cattle were—

(1) throwing open the Government forests,

(2) permitting the collection of anjan leaves for fodder,

(3) supply of compressed grass.

A cattle camp was opened, but very few animals were offered for it and it was afterwards

used as a depôt for cattle bought out of the Charitable Fund.

The relief afforded by the first measure was diminished by the fact that in a year of famine the crop of grass in the forests in the centre of the district is naturally of little account, and quickly disappeared. In the hills the crop was better, but there was a great difficulty in obtaining water and the cattle were exposed to the ravages of Bhils who killed stray animals for the flesh and hides. Of the cattle sent to the hills to graze only a small proportion returned. The Bhils themselves continued bringing down from the hills bundles of grass and bamboo leaves which found a ready sale.

The concession of the privilege of collecting anjan leaves was widely taken advantage of. The trees came into leaf three times and many of the Bhils made a living by collecting and selling this form of fodder. Serious damage was, however, done to the trees by lopping the large branches to get at the leaves.

Of the grass cut and pressed at Navápur 50 lákhs pounds were sent to a central depôt on the Tápti Valley Railway. Six other depôts were opened on the Great Indian Peninsula Railway. I do not remember the quantities supplied. The real demand for Government grass did not arise till the beginning of May, when in that month and in June the stocks were quickly cleared off. Part of a consignment at Chálisgaon was unused as it arrived shortly before the new grass was coming into the market.

With the exception of 100,000 pounds supplied to the Police sowars the whole quantity was disposed of to cultivators either for cash or as a tagái loan. For the poorer classes of cultivators the price, whether paid for in cash or taken as a loan, was reduced from Rs. 10 to Rs. 2 to Rs. 5 per 1,000 lbs., the balance being debited to the Relief Fund.

Gratuitous Relief.

68. On large public relief works dependants were relieved with cooked food.

On the Forest demarcation work for the hill villages, the relief of dependants was allowed for in the wage paid to the workers.

69. Apart from the relief by cooked food at the relief camps, kitchens to dependants and other persons unfit for work but not dependants on workers the form of gratuitous relief most generally adopted was the distribution of a grain dole. It was chosen because it seemed to be the simplest and less open to abuse and because it had worked well in previous famines.

70. Among the aborigines the dole distribution was extended to many cases in which in dealing with any other class the applicants would have been referred to a relief work.

The dole was also extended after the commencement of the rains to the dependants of agriculturists who had returned from the relief works to

till their land. Their admission was for a limited period only.

The recipients of the dole were selected by persons with local knowledge.

71. Sixteen poor-houses including one in the Dangs were opened. The first to be opened was the one at Nandurbár, which was started in the last week of March, and was quickly followed by poor-houses at Taloda, Shaháda, Dhadgaon in the Akrani, Navàpur, Pimpalner and Shirpur. Then followed three in the south at Chálisgaon, Jámner and Páchora, and by the middle of April one at Dhulia. At the beginning of May the poor-house in the Dangs was opened. Then came the poor-house at Bhusaval and after the rains began the poor-houses at Jalgaon, Ráver and Sinkheda.

In the north and west the people who frequented them belonged almost altogether to the aboriginal tribes. In the Dhulia and Bhusával poor-houses the inmates were the idle and infirm of all classes who were attracted to the large towns in the hope of getting charity. In Chálisgaon, Jámner, Páchora and Jalgaon the inmates came largely from the Ghaut villages in Hyderabad. The first three had to be opened solely on account of the influx of these destitute immigrants.

The Ráver poor-house in the extreme east was opened after the rains commenced to provide for an influx of destitute persons on the move from the Central Provinces towards the Berars.

The largest poor-houses were those at Dhulia and Nandurbár where the population at one time exceeded 2,000 each. Taloda came next with a maximum of 1,800, Shaháda 1,200 to 1,500, Shirpur and Bhusával 1,000 to 1,100, Navápur, Pimpalner, Dhadgaon and the Dangs 600 to 700 each, Páchora, Chálisgaon and Jámner about 300 each, Jalgaon, Ráver and Sinkheda 100 or less.

72. The poor-houses were used as depôts for vagrants and immigrants. I do not think there were any instances of persons being sent to the poor-house from the relief works as a punishment for refusing to work.

73. Steps were taken periodically to weed out the poor-houses and send the people either to their homes or to relief works. The classes who applied for poor-house relief or who were brought on to them were as a rule most averse to doing any regular work in return for the relief given, and when sent to the relief works gradually drifted back again to the poor-house and had perforce to be re-admitted. Those who were sent to their homes were put on the grain dole for a time.

Kitchens.

74 to 77. Persons on the dole lists were relieved by cooked food at the poor-house or relief camp kitchens, if they lived within a reasonable distance of them. The relief camp kitchen destitutes who were not dependants on workers were admitted at the discretion of the Civil officer. Apart from these there were no regular village

kitchens. Arrangements were made in several villages to have the dole given in cooked food to orphans, deserted children and to very destitute persons who could not get their food cooked. This relief was given to those who had been admitted to the dole. There was no hard and fast rule to prevent their taking away the food, but they usually partook of it where it was cooked.

71 (*2*). The poor-house ration was :—

Adults . .	15 ounces with dhal, salt, condiments and oil.
Children over 8 .	9 ounces with dhal, salt, conments and oil.
Children under 8	7 ounces with dhal, salt, condiments and oil.

In the poor-houses in the west where the bulk of those relieved belonged to the aboriginal tribes the grain given was rice. In the other poor-houses jawári was used.

The poor-house ration was varied to meet the case of sickness or weakness. The emaciated were given milk if it could be had and if not a kanji of rice and molasses with a little ghee. Those in hospital were given hospital diet at the discretion of the Medical Officer who was kept supplied with tinned milk and Mellin's food.

75 (*2*). The village gratuitous relief lists were drawn up by the Circle Inspectors and checked by the Special Aval Kárkuns, by the Mámlatdárs and by the Assistant Collectors. The Circle Inspector visited each village in his charge once a week usually, sometimes once a fortnight, and examined the dole recipients, adding or striking off names as might be necessary. He was also present at the weekly distributions at the various centres. The Special Aval Kárkun was present at some of the distributions and went round every village in his charge during the month.

76. Payments were made (*a*) in grain, (*b*) weekly, (*c*) at various selected centres in each táluka and petha.

77. Among the aborigines dole was distributed with more liberality than is contemplated in the Code. It was there given to persons who were falling into a reduced condition and could not be induced to leave their villages for other kinds of relief. This had to be continued till the maize crop was ready.

78. The cooks employed were of the Kunbi or some corresponding caste except in the poor-houses and the wilder parts such as at Navápur, Dhadgaon and the Dangs where Maochi and Bhil women were employed to cook, none other being available.

In some of the kitchens members of such castes as the Sonárs objected to take cooked food. They were few in number and were allowed to take the uncooked ration. In the neighbourhood of the poor-houses and relief camp kitchens an attempt was made to induce those on the dole lists to come to the kitchen for cooked food. They were not

required to reside in the poor house or at the kitchen. Some held out for a time and then accepted the relief in the form it was offered, but others had to be re-admitted to the grain dole. The grain dole was much preferred as it allowed the recipients more freedom. The wilder of the aborigines manifested a strong desire to eat their food away from observation.

79. The poor-houses were in charge of Superintendents with salaries varying from Rs. 30 to Rs. 100. Their work was supervised by the Mámlatdárs and Assistant Collectors. At the Dhulia poor-house the Superintendent was a Pársi whose services were lent by the Abkári Farmers. He worked under the supervision of the Personal Assistant to the Collector.

80. Cheap grain shops were opened for the aborigines in the tálukás of Pimpalner, Nandurbár with Navápur Petha and the Dangs. The Circle Inspector or Special Aval Kárkun was present at the weekly sale at each centre and beyond his satisfying himself that the applicant belonged to one of the wild tribes there was no restriction on admissions to the benefit. The amount allowed to each purchaser was calculated to last him a week. If he required more for his family he had to bring a chit from the village officer or to apply previously to the Circle Inspector or Aval Kárkun who gave chits on their rounds.

I do not know the exact cost of this form of relief. It proved a very useful form in dealing with the aborigines.

81. The cheap grain shops did not so far as I am aware in any way discourage the importation of grain and I have no reason to believe that they affected general prices.

Suspensions and Remissions of Land Revenue.

82. I am unable to give the figures.

83. Remissions and suspensions were not based solely on crop failure, but the general capacity of the individual to pay was taken into account. Detailed instructions were issued to the Sub-Divisional Officers and Mámlatdárs dividing the revenue payers into certain categories and defining the course of action to be adopted with regard to each. The revenue collections then opened in the ordinary course, and it rested with the Mámlatdárs on information supplied by the village officers or obtained by personal inquiry to decide in what category any particular case came. The Mámlatdár could not proceed to distraint. If he thought that such a course should be adopted he had to submit a detailed report to the Sub-Divisional Officer and obtain his orders.

84. The suspensions and remissions to be granted could not under the system adopted have been determined before the collections began, but though no suspensions were actually sanctioned

beforehand, the demand was not pressed against all indiscriminately.

85. Not applicable.

86. I cannot say that I observed any facts of the nature mentioned.

GENERAL.

87. The population of Khándesh is about 1,450,000. Of this 15 per cent. would be about 217,500. This number was exceeded by the number in receipt of relief under all heads. The reason briefly is that the famine was more severe than had ever been experienced before in Khándesh. The population includes many aborigines who lead a precarious life in the best of seasons. The labouring population is also large. Their resources, were exhausted by high prices, and as credit was contracted they had to come on relief.

88. I do not consider that the relief given was defective in the east and central portion of the district. There was little disorganization consequent on the outbreaks of cholera except in the Sinhheda Táluka in the centre of the district where some who were driven off relief by cholera in April did not return to any work till the Nardána work was opened in June. There were during the interval three or four works within easy reach of the affected tract.

In the camps in the west the ravages of cholera were more severe. They occurred in March and April. Owing to the severity of the attacks and to the more timid nature of the people in these parts, the re-organization of relief after the epidemics had passed over was a matter of great difficulty. Here too wandering destitutes largely from Native States on our border, were attracted to the larger bazár towns. Poor-houses were the only suitable method of relieving them. Owing to a misunderstanding poor-houses were not opened till the end of March. This matter was separately reported on.

The question whether the relief given was excessive at any particular period is one of more difficulty, because it is impossible to estimate what resources the applicants for relief were possessed of.

89. The large majority of the applicants for relief belonged to the labouring classes, agricultural and professional labourers. Of the agriculturists who came, I believe most were tenants-at-will who cultivated land belonging to a superior holder or whose lands had virtually passed into the ownership of money-lenders. The number of State ryots holding a saleable interest on their land who went on relief was not large. Such cases were most numerous from the poorer villages lying along the banks of the Tápti.

90. Khándesh did not suffer severely in 1896-97 nor as compared with the more southern districts in 1876-77, and it is difficult to institute any comparison between the attitudeof the people

in these years, and what it was in the severe famine of 1899-1900. There is in my opinion little doubt that caste feeling is losing its influence; there is less cohesion in the various communities, and the tendency to look to Government for everything is undermining the thrift and independence of the people. An example of this was much in evidence in connection with the improvement of the water-supply in villages. In many cases all that had to be done was to sink shallow wells in the bed of a nullah, but frequently the villagers would not take the trouble to do this without the initiative of a Government officer.

91. The money-lenders were chary of advancing money when they saw no immediate prospect of getting a return. An instance may be quoted in connection with the petty timber trade carried on in the Sátpuda jungles. In ordinary years a considerable quantity of timber is extracted by the headmen in the jungle villages. The money-lenders in Taloda and Shahádа finance the operations, making small advances to be set off against the price of the wood which they take over. This year the trade was altogether suspended because they refused to make advances, fearing probably that the money would be spent in procuring food. Cultivators in similar circumstances probably found money as hard to raise.

Of people coming on relief before they had exhausted their own resources I can quote only a few cases in which there was no concealment :—

(1) A large gang of professional stone-breakers (Vanjaras) brought with them to the Mehunbára camp a number of carts and bullocks and continued on work till the close.

(2) One woman who had been two months on a relief work found on her return that a store of Rs. 200 which she had buried had been rifled, and reported the matter to the Police.

(3) A new-comer at the Sávda Camp was found to be the possessor of Rs. 50 in cash.

It is impossible to argue from these isolated cases. People who had any resources either in cash or jewels were not likely to make any display of them. From villages near a work no doubt people came who could have well afforded to remain at home. Those who came from distant villages could not make frequent visits to their homes to see that their goods were safe, and thus they did not come on the works if they could possibly get on without doing so.

92 and 93. If residence on the works is made compulsory and the rule strictly enforced, I should consider the code tests sufficient. Compulsory residence proved by far the most efficient test. The disadvantage is that it cannot be applied in the cold weather when works are usually first opened without a heavy expenditure on hutting. Further,

the hutting material cannot well be held ready in sufficient quantity beforehand. Without compulsory residence people who are not actually in need of relief come on to the works if they happen to be opened within easy reach of their villages. They are more apt to do so at the commencement when things are not in full working order and there are more chances of getting a wage for doing nothing. Compulsory residence is by no means easy to enforce, but an effective amount of obedience to the rule can be secured by an energetic officer in charge of the camp. If it is coupled with strictness in taking the musters at the appointed time, unpunctuality being punished by a mark of absence, the number resorting to the camp who are not in need of relief is likely to be kept within reasonable limits.

I cannot suggest any workable test for the period during which the compulsory residence test is inapplicable. In severe famine any method of selection would be sure to break down. The need of relief can only be gauged by the voluntary action of the people under such tests as can be applied in camp.

The distance test is subject to the same disadvantage as compulsory residence. Workers can not be expected to come long distances from their homes unless some shelter is provided. Further, this test opens a great field for jobbery to the mustering kárkuns and mukádams and can easily be evaded. If chits are required, hardship may be caused by incompetence or negligence on the part of those giving the chits.

94. In villages the registration of births and deaths is effected by the village officers. Their work is regularly checked by the Circle Inspector's staff. In muni ipal towns the registration is carried out by the municipal officers. In the relief camps the record was kept by the officer in charge of the camp.

95. I have not the mortality statistics of the district before me. I would remark, however, in this connection that the epidemic of cholera in the hot weather was of unusual severity and was widespread. It was particularly virulent in the hill villages where the sources of water-supply were bad and scanty and once contaminated spread infection over a wide area. Instances were discovered where deaths due to cholera in certain villages were attributed to other causes. Small-pox was prevalent but did not add materially to the death-rate. The mortality among infants must have been high as many cases of emaciated children in arms of seemingly well-nourished mothers were to be seen. An impure water-supply in certain villages and the immigration of destitutes must have added to the death-rate, but setting these causes aside there was a large increase attributable to diseases connected with insufficient or unsuitable food.

96. I cannot say how far an impure or insufficient water-supply caused an increased mortality. It certainly led to a widespread epidemic of

cholera In many of the hill villages and in some villages on the rocky uplands water became scanty and bad. The villages on the Tápti banks had to depend on the much polluted supply brought down by the river. This must have caused more cases of intestinal disorder than occur in an ordinary year.

In villages the water-supply was carefully watched and reported on by the Special Aval Kárkuns in their rounds and where necessary expenditure was incurred in improving the supply out of the Government grant allotted for this purpose. Each Mámlatdár had a portion of the grant at his disposal which he could utilize at once.

The wells were not regularly purified with permanganate of potash as the people are not fully accustomed to it.

On relief works a good water-supply was always the first point. The only places where the water-supply arrangements proved defective was where the camp had been placed near a running stream. This was the case with five camps before the cholera outbreak. The people resorted to the running water in preference to the protected wells, and as the streams were not flowing in any great volume they were the more easily infected. The danger was not sufficiently realized till too late. All the camps were badly infected, and instead of attempting the impossible task of preventing the use of the stream the remedy adopted was to move the camps away from running water altogether.

Permanganate of potash was not used everywhere as a matter of course, but only where it could be safely done without alarming the people and driving them to other impure sources. More reliance was placed on protecting the wells from direct pollution.

97. (*a*) On works trench latrines were provided on the east side and within easy reach of the residential blocks, and the camp watchman directed the people to them in the early morning. Subsidiary latrines were also provided near the working stances if these were at an inconvenient distance from the ordinary latrines. The compartments for males and females were separate and screened off, and the trenches were covered in with fresh earth daily. The resort to them was not always so complete as might have been desired, and it was necessary at nearly every camp to provide a conservancy gang, whose duty it was to clear up and convey to the trenches all nightsoil and filth from the camp area and its neighbourhood. Workers of the sweeper class were not always available, but in their absence the work was done by a gang of Mahárs provided with long-handled pávráhs.

(*b*) In poor-houses the trench latrine system was adopted everywhere, except at Dhulia where an open field was used, a portion being screened off for females. A gang of sweepers was employed, and the nightsoil was cleared off regularly and removed to the municipal depôt. Where sweepers are available, this method is very cleanly and willingly adopted by the people.

The poor-house Superintendents supervised the sanitary arrangements in every case. The trenches or latrine ground was connected with the poor-houses by a fenced path, and the inmates had no choice but to resort to them. The only case in which the sanitary arrangements were badly reported on was at Nandurbár where the matter was put to right by appointing a more responsible Superintendent.

98. The grain shops on the works were regularly inspected by the Civil Officers. They occasionally found it necessary to prohibit the sale of certain supplies of grain.

99. Until the rains began there were practically no wild products with which the people could supplement their food. If there happened to be any irrigated lands in the neighbourhood they foraged there for sweet potato leaves or any similar product which could be used as a vegetable. After the rains began they used as a vegetable a weed with a leaf somewhat similar to clover, which came up in great abundance. As the season advanced the hill folk obtained a supply of jungle roots and later still supplies of grass seed. The District Medical Officer was of opinion that the food they thus obtained helped to increase the mortality.

100. There was extensive immigration into Khándesh, mainly from Hyderabad Territory on the south and from Baroda and other Gujarát States on the west. From Holkar's Territory and the Barwáni State there was little. A few bad cases came thence over the Ghaut to Shirpur, and some found employment on the camps in Shirpur and Chopda. An encampment of 2,000 people, who were dispersed by a very severe epidemic of cholera, while grass cutting in the Shirpur forests, are also said to have come from the Holkar's Territory.

Immigration from the south and west was an appreciable quantity, though for various reasons it was impossible to obtain an exact record of its extent. I believe that when relief works were first opened in Edalabad the numbers were largely augmented by arrivals from Berár and Hyderabad Territory. The Berár people gradually left, but the Hyderabad refugees kept on coming to the centre and south of the district all through the famine. The Hyderabad authorities were communicated with, but no practical arrangement for taking over the immigrants was made till well on into rains, when many had gone back of their own accord and when we were centralizing our works. Even then there was a body of 700 workers with dependants at one of our camps, which at the time, as far as I remember, had only 1,400 workers all told. The poor-house population on this side was in the main made up from refugees from the Ghaut villages in Hyderabad. They were sent back from time to time by cart, but many had to be kept for long periods before they were fit to travel.

From the west immigrants came to Navápur and Nandurbár from the Songad Táluka in Gaikwári and to Taloda and Shahádа from the Chota

Nagpur, Rájpipla and other small States. These arrivals were in a state of great destitution. They came as beggars, attracted to the bazárs in the hope of getting charity and of picking up fallen grain outside the shops. It was practically impossible to ascertain to what village they belonged. In Navápur they belonged to the same Maochi tribe by which that Petha is populated. At Taloda and Shaháda they were mostly Dhankas, a tribe of which there is only a small community in Khándesh.

I am unable to hazard even a rough estimate of the number of such immigrants.

101. These immigrants arrived in such a destitute condition that the mortality among them was very high, and I have no doubt appreciably affected the total mortality of the district.

102. At the end of the famine every endeavour was made to dispose of orphans and deserted children by inducing relatives or caste people to take charge of them. The residue were made over to the Church Mission Society, the few non-Bhils being taken to an orphanage in the Násik District, the Bhils going to a newly-established orphanage at Nandurbár.

103. No suggestions to offer.

104. While grass was being sent from Navápur the officer in charge of the operations had difficulty at first in getting the necessary number of wagons, and at the rate at which the grass began to come in February and March it appeared as if it would be into June before the whole consignments arrived at Nardána. The Railway authorities were induced to expedite matters, and in April and May the grass was sent promptly enough for all requirements. With the consignments which came over the Great Indian Peninsula Railway in May and June there was never much delay.

I heard no complaints about insufficient means of carriage of grain. The local prices of foodgrains were not raised on account of any defect in Railway carriage. The new Tapti Valley Railway, by bringing up grain to the west of the district and north of the Tapti, was of incalculable benefit. Had the Great Indian Peninsula section of it been complete before the rains, it would have helped prices in the central tálukas, which depend on the Jalgaon market, when they were cut off by floods in the Girna.

104 (*a*). The various station masters reported imports and exports by weekly post-cards. I have no reason to believe that the information they gave was inaccurate. There was practically no import by road. North of the Tápti the bazárs used to depend on imports from Barwáni and Nimár. This importation ceased, but its place was taken by importation along the Tápti Valley Railway.

105. A complaint was received by the Executive Engineer, Relief Operations, from the Railway Engineer on the Great Indian Peninsula

section of the Tápti Valley Railway about the relief camps in the neighbourhood competing with his labour supply. This was, I think, in January or February, when three large camps were open near the railway line. The Executive Engineer offered to send the labour required, but in the meantime the difficulty which appears to have been only a temporary one disappeared. No other complaint was received till the rains had well begun, when agriculturists in some places urged that they could not get sufficient labour for weeding. Prices were still high, and it was a question whether the wage offered was sufficient, but orders were issued for the introduction of the piece-work system and the difficulty was removed.

106. From what I could gather in my short experience of the district, I do not think there has been any marked change in recent years in the character of the crops sown. Cotton is the chief crop, and if there has been any change it has probably taken the form of an extension of cotton cultivation at the expense of fooder crops. The way in which many of the old irrigation wells have been neglected points to this. Cotton is grown as a monsoon crop, and in spite of the fact that it does not pay so well as it used to, the ease with which it is raised and its better chance of yielding moderately good results even in a bad season lead the cultivator to prefer it.

107. The harvest wages are paid at least partly in grain, but the tendency is to substitute a cash wage. I am unable to say whether cash wages have risen in sympathy with the rise in prices.

108. The only points in which, so far as I remember the provisions of the Famine Code were departed from were:—

(1) The wide extensions of gratuitous relief noted in my answer to question 270.

(2) The admission to the kitchen and to class IV (*l*) (nominally worked) of persons who were not dependent on any worker.

(3) The relief at the kitchens on works or at the poor-house kitchens of persons eligible for the village dole who resided in the vicinity of a relief work or poor-house.

The number of non-dependants who were relieved at the relief-work kitchens was considerable. More were also included among the nominal workers whose relief came under the head of gratuitous. The departure was necessary in view of the severity of the famine. Instances of abuse of the latitude allowed no doubt occurred. Parents who were not on the works and presumably not in need of relief sent their children to be fed in the kitchens. The necessity of the case, however, outweighed the effect of such abuse. For instance, at one cholera-stricken camp many children continued to come to

the kitchen while the parents absented themselves from the work till the epidemic died down.

The relief by cooked food of those on the dole in villages adjoining a relief camp or poor-house kitchen was of limited effect. If they were required to come longer distances than about a mile, they frequently omitted to come. It was useful so far as it went, but could not take the place of the dole altogether.

109. Staff Corps Officers were employed in supervising relief works. Officers of the Native Army were employed as Camp Superintendents. No Non-Commissioned Officers of the British Army were employed.

I cannot suggest any other source from which supervising officers can be drawn. We had one excellent officer from the Postal Department.

The subordinate staff of a camp would be strengthened if, when an officer of the Native Army is sent, he be accompanied by a body of the privates under him in his regiment. The privates would act as muster-takers, etc., on the works, and working under their own officers would be far more efficient and trustworthy than the Brahmin kárkuns on whom we have to depend.

110. Non-official agency was not employed to any extent. For the Dhulia poor-house the liquor contractors supplied a Superintendent who did good work, and for relief in the Dángs his agents helped when required.

111. I am unable to answer this without the necessary figures. I can only say that neither the introduction of penal fining, nor of the rule of compulsory residence, nor the change from the Code task to payment-by-results system led to disorganization or wandering. There was no drafting as a test of necessity.

112. I did not notice any indication such as would lead me to believe that the massing of people on large works tends to disorganize family life or to weaken social restraints or to relax moral ties. It is obvious that in the straits to which a severe famine reduces the people family ties are weakened and social restraints, which with the native of India are comprised in caste retraints, are violated, but I should hesitate to attribute this to the method of relief adopted.

Kha'n Sa'heb Dinsha Jamsetji.

Answers by Khán Sáheb Dinsha Jamsetji, Mámlatdár of Prántij, to the questions drawn up by the Famine Commission.

1. In the beginning the outlook was good. Rains stopped all at once and vanished away. Harvests in the two preceding years were quite up to the average.

2. Yes. The following is the area sown in the previous five years as compared with the area sown during the year in question :—

	A.	g.
1895-96.....	124,264	8
1896-97.....	122,161	6
1897-98.....	125,621	7
1898-99.....	128,864	11
1899-1900.....	43,111	3

3. The average rainfall of the táluka is about 30 inches. The rainfall of the year in question was 3 inches 69 cents, *i.e.* 12·3 per cent. of the normal. The rains ceased practically in the middle of October, after which there was very insignificant rain. Rain distribution is as under :—

Month.	Actual rainfall in 1899.		Average fall.	
	In.	cts.	In.	cts.
June	2	50	6	0
July	0	30	10	0
August	0	5	8	0
Sept.	0	11	6	0

4. 2 per cent.

5. (*a*) 50 per cent.

(*b*) 17 per cent.

6. In an agricultural country like this, failure of crop and even fodder were in themselves sufficient to create the assumption of the necessity.

7. Influx of wanderers following failure of crop and a cry for labour were proofs of the situation.

8, 9, 10. These are matters with which the Mámlatdár had nothing to do.

11. The following was the order :—

(*a*), *c* (1), *b*, *e*, *d*, *c* (2).

12. (*a*) Village Accountant and Village Panch under the orders of Mámlatdárs and Sub-divisional Officers when dole commenced in the beginning of October 1899.

(*b*) Too little was available to do anything.

(*c*) Private gentlemen used enormous money in cheap grain shops, clothing and other comforts, but according to their own ways.

(*d*) Mámlatdár, Aval-kárkún, Circle Inspectors and higher officers constantly moved throughout the táluka.

13. Yes, and as under :—

Under Act XIX of 1883, Rs. 17,890-0-0

Do. XII of 1884, „ 5,661-8-0

up to the end of March 1900 under the conditions prescribed in rules framed by the Government of Bombay.

Latterly further concessions were granted as regards subsequent advances. The loans are made recoverable in whole, though nearly 50 per cent. will, I fear, be finally so recovered.

14. Yes, in a great majority of my táluka. Water went down about 30 feet below the ordinary surface. Digging of wells was encouraged by loans. These wells were very partially successful in securing crop. Most of the wells were kacha wells and therefore at the time no permanent improvement, but if sufficient funds be granted they might become a permanent improvement. They did not employ even temporarily an appreciable number of labourers.

15. Ordinary village tanks were taken up by the Local Board under the Mámlatdár's supervision.

16. Very nearly Code tasks were exacted irrespective of any other circumstance.

17. Yes; no.

18. Larger demand for labour.

19 to 51. Not for the Mámlatdár to answer.

52. They helped in giving relief to the population who left works on account of cholera scare and brought people near their homes for preparing themselves for kharif cultivation.

53. Small village tank works (ordinary).

54. *b* (1), *i.e.* Local Fund Overseer.

55. Requires no reply.

56. Yes. Code scale of wages as prescribed by the Collector in writing. Employment was not refused to any.

57. No.

58. No.

59. Yes. Because it would help to keep up the usual agricultural and household arrangements and with cheaper rates of wages.

60. No.

61. None exist in this táluka.

62. No.

63. No.

64. No.

65. Requires no reply.

66. Exportation of cattle to Thána and Dharampur. Fodder cultivation; sending cattle to cattle camp started in Ahmedabad; importation and sale at cheap rates of grass. This was very much helped by the Central Charity Fund, resulting in sales at Rs. 2 per 1,000 lbs. to poor cultivators. These measures were more or less successful, but would have been more so if more grass could have been imported in time. Exportation of cattle to Thána forest was a failure, nearly all cattle sent there having not returned.

67. Yes, but measures as stated in 66 above were too slow and insufficient.

68. (*a*) cooked food;

(*b*) grain dole uncooked.

69. Large works executed by Public Works Department for the able-bodied and village dole and poor-house for the rest were equally resorted to as they were the only available remedies.

70. The report is not with the Mámlatdar and therefore he cannot reply.

71. Only one in this táluka opened by the end of November. Destitute wanderers were admitted, the largest number, *viz.* 314, being in the month of July 1900.

72. Yes, if they were destitute and incapable of doing work. No.

73. Yes, when the inmates became able they were drafted on to works.

74. No village kitchen opened before the rains. Six opened after the rains. 5 miles.

75. Code rations twice a day at nearly fixed hours were given on the premises.

76. No; but none was opened close to a relief work.

77. Free to those entitled to village doles.

74. Code ration. Khichdi in the morning and bread in the evening. The sick were treated specially by Medical officers.

75. By the Village Panch and Village Officers and checked by Inspecting Officers. Once every ten days by Circle Inspectors and as often as they could by Inspecting Officers.

76. In grain daily and at Modi's shop.

77. To children and incapable dependants of cultivators to enable them to take to kharif cultivation, supplanted latterly by grants from charitable funds.

78. Bráhmins and other castes to which the recipients would not object. No.

79. Village officers supervised and checked by Inspecting officers.

80. Cheap grain shops were opened in large villages by private gentlemen. Grain worth about Rs. 5,000 was so sold. The restriction was only that very small quantity was sold to one individual in one day. It simply helped in the beginning in keeping down the grain speculation and consequent rise in price.

81. No.

82. Rs. 79,678-10-6 was suspended out of Rs. 1,19,704-12-0, the total revenue of this táluka. Remissions are yet under the consideration of higher authorities.

83. General paying capacity as far as it could be determined under the orders of the Collector by village officers, Circle Inspectors and tested by Avalkárkúns, Mámlatdár and other Inspecting officers was the criterion.

84. After collection of revenue began.

85. There are tenants-at-will in Inámi, Táluk-dári and Mehvási villages of the táluka. There was very little to collect from them.

86. No; though some cases of a lease by inserting the better-to-do and omitting the fitter people might have occurred here and there and escaped notice.

87. No.

88. Yes, relief was at different times excessive and defective in some places, and therefore much looking after had to be used to remedy the defect.

89. Mostly the lower classes. About 12 per cent. of the relief workers were the occupants of land.

90. No famine to the Mámlatdár's knowledge during the tenure of his service of 40 years.

91. Yes. Private credit was in fact altogether stopped. People did not leave a single stone unturned before coming to relief works. They sold everything they possessed before their arrival.

92. Yes.

93. No further test is wanted.

94. Births and deaths are entered in Village Form No. 14 by the Mukhi and checked by Inspecting officers.

95. The high mortality in this táluka is partly due in the Mámlatdár's humble opinion to unsuitable food.

96. During the cholera epidemic permanganate of potash was used to disinfect wells in Municipal town, as well as in almost all the villages of the táluka, probably once a week.

97. (*a*), (*b*), (*c*) Trenches were dug and a sufficient number of Bhangis were employed and were supervised by the officers in charge of those institutions.

98. Yes. It sometimes disclosed inferior grain, which was condemned.

99. Beggarly people boiled leaves of a wild creeper called *dodi* with a little amount of corn and made it their food for some time. Though the creeper in question is used as a vegetable to some extent even in ordinary times, still the constant and excessive consumption thereof necessitated by famine greatly told on the health of the helpless creatures.

100. Yes, enormously from Baroda and Mahi Kántha territories. The undersigned estimates that 25 per cent. of the number may be outsiders.

101. The mortality was much higher among immigrants.

102. They were made over to native institutions and Missionaries.

103. None.

104. The rolling stock of the B. B. and C. I. Railway was quite insufficient to meet the demands of the critical occasion. Grass importers and persons and cultivators who had gone on the line of the Tápti Valley Railway, where grass was procurable, were kept waiting for days together, and the result was that a large quantity of grass was consumed by fire.

104. (*a*) The Mámlatdár can't opine.

105. Not till the rains fell.

106. No.

107. Yes, partly.

108. Yes. In the case of cultivators doles were given to them in the beginning of the cultivating season, and in the case of labourers drafted on works grain ration was given to them and in no other case there was such departure. In the undersigned's experience these departures were justified.

109. Yes, Captain Ford was the only Commissioned officer employed in this táluka.

110. Reverend Stevenson was the only non-official in this táluka who did some famine work, and he worked creditably.

111 and 112. Undersigned regrets he is not able to deal with these questions with the consideration they deserve. They are most important among all

the questions in these papers. What he can now say is that the people were very reluctant to live in compulsory residence or to go to distant works, and that the mode of payments was somewhere defective, so much so, that persons returning from the works had to be put on doles or in kitchens or poor-house in consequence of their being found in a wretched condition. He for one would humbly venture to propose that instead of massing people on large works, small works useful to the village may be opened within the radius of 4 or 5 miles and put in charge of the village officers with one Aval-kárkún at their head supervised by the Relief Mámlatdár and other inspecting officers. If this is done it would greatly lessen the evils which are now brought to notice and at the same time cause a great saving of Government money.

D. JAMSEDJI,

Mámlatdár, Parántij.

Parántij, 13th January 1901.

1339

Honourable Rao Bahadur Chunilal Venilal.

Answers by the Honourable Ráo Báhádur Chunilál Venilál, C.I.E., to the questions drawn up by the Famine Commission.

1.—When the rains of 1899 commenced in the month of June the outlook in this district was good, the major part having fallen in that month. The character of the harvests in the two preceding years was as follows:—

1. In 1897, cotton crop was very good though the prices were low and grain crops were about 10 annas.
2. In 1898, both cotton and grain crops were about 12 annas.

3.—(*a*) The average rainfall of this district during the rainy season is from 35 to 40 inches. (*b*) The actual rainfall in the rainy season of 1899 was about 8 inches, representing about $\frac{1}{5}$th of the average. (*c*) The rains ceased from the month of July although passing showers fell in every month up to September. (*d*) The distribution of the rainfall compared with the average was in 1899 as follows:—

June	about	$\frac{1}{6}$
July	„	$\frac{1}{8}\frac{1}{0}$
August	„	$\frac{1}{7}\frac{1}{0}$
September	„	$\frac{1}{7}\frac{1}{0}$

12.—The system of local inspection and control instituted in the city of Broach was as follows:—

(*b*) To stimulate the local employment of labour the excavation in the main tank was commenced at the end of September under the control of the managing Committee of the Municipality.

(*c*) Local charity was organized at the end of August by raising private subscriptions amounting to Rs. 24,236. From this fund shops for selling grains at cheaper rates than that obtained in the bazár were established and grains given gratis to respectable poor people who could not go to work, clothes to the poor and needy were distributed and supplied to the poor-houses opened by Government and by private subscriptions, and a contribution of Rs. 2,000 was made to the cattle camp.

38.—Payment was made daily at the tank as I considered it desirable and it was found to be practicable.

40.—Payment was made to the individual. I prefer this method of payment as a safeguard against the head of the gang misappropriating the whole or a part of it to his own use.

57.—A system of selection of applicants for relief was tried at the Municipal tank by making inquiries about the condition of each individual and it was fairly successful because the applicants mostly

belonged to the city and their number was not very large.

59.—In my opinion it is desirable to extend small village relief works for the following reasons :—

(*a*) The heavy cost of maintaining large establishments and of erecting sheds for the accommodation of large number of labourers would be saved.

(*b*) The risk of high mortality and spread of epidemic diseases in the neighbourhood owing to large congregation of people would be avoided.

(*c*) The works will prove beneficial to the villages themselves.

73.—In the city of Broach, in the poor-house maintained by private subscription under the management of a committee of which I was Chairman, measures were taken periodically to send people to their homes or to relief works.

80.—Cheap grain shops were opened in the city of Broach for poor classes and admission to their benefit was regulated by giving tickets after inquiry as regards their condition. This form of relief was fairly successful and its actual cost in shape of the loss in prices was Rs. 6,562.

81.—Answer in the negative.

90.—This being the first famine of its kind in this district there is no data for comparison.

92.—Answer in the affirmative.

94.—I understand that this question relates to the registration of births and deaths at the relief works. If so, I am unable to answer, having nothing to do with them.

95 and 96.—As above.

97. (*b*).—The following sanitary arrangements were made at the private poor-house :—

1. Every inmate before admission was given a bath and a new suit of clothes.

2. All new admissions were kept in a separate ward called "the observation ward" for 48 hours, and if found to be free from any infectious disease, after that period, were allowed to enter the general wards.

3. Those found to be suffering from any infectious disease, such as cholera, small-pox or relapsing fever, were removed to a separate shed called "infectious disease ward."

4. All dirty clothes and earthen utensils belonging to the inmates were destroyed.

5. A party of women was set apart to draw water from an untainted well and the water was *well boiled* and then stored in large earthen chatties. This water was *doled out* to the inmates by three or four women appointed for the purpose. At the time when cholera was prevailing Potash permanganate was put in the boiled water the night before it was used.

6. All grain and vegetables were examined by at least two members of the Committee before cooking.

7. The latrines were built on the lee-ward side of the poor-house at a reasonable distance and they were cleaned and disinfected at least twice a day. A staff of bhangis was kept on the spot and no inmate was allowed to squat round about the poor-house.

8. The inmates and attendants of the infectious ward were not allowed to enter the poor-house proper nor to mix with its inmates.

104.—I did hear complaints regarding the inability of the Railways to keep pace with the fodder traffic to this district. Their nature was that no waggons to carry grass could be obtained.

105 and 106.—Answer in the negative.

107.—Answer in the affirmative.

CHUNILAL VENILAL.

Broach, 11th January 1901.

G. I. C. P. O.—No. 57 E. & A. 13-5-1901.—50.—H. R.

Rao Bahadur LALSHANKAR UMIASHANKAR TARVADI.

Answers by Ráo Bahádur Lálshankar Umiáshankar, Judge, Small Cause Court, Ahmedabad, to the questions drawn up by the Famine Commission.

Question 66.—After the dry months of June and July cattle began to starve, and a meeting was held, presided over by the Honourable Mr. Lely, C.S.I., Commissioner, N. D., in August, at the Nagar Sheth's house to take steps to save them. A committee was appointed to raise subscriptions for the purpose and Rs. 20,000 were collected. With this capital grass of the value of Rs. 32,752 was purchased, of which nearly Rs. 15,025 worth of fodder was sold to the poor at a cheap rate and the rest was devoted towards feeding, for 2½ months, 2,500 cows (1,500 purchased by the committee at a nominal price and 1,000 received by them without payment). These cows were then handed over to the Mahájan Pánjrápol, where 20,345 cattle were received, of which 5,133 survived at the end of the famine. In maintaining this Pánjrápol managed by Sheth Mansukhbhái Bhagubhái, the Mahájan incurred an expense of no less than Rs. 3,46,941, which gives about Rs. 70 per each head of cattle.

In September 1899 the Honourable Mr. Lely devised a plan to start cattle camps in different places, and by his efforts several were started at Ahmedabad and other places. In Ahmedabad there were four such camps. The first cattle camp was started in September, second in October, third and fourth in November. I was in charge of the Ahmedabad Cattle Camp No. 2. The particulars of that camp are as follows:—

255 cattle were purchased for Rs. 388;
407 cattle were received gratis;
278 were received on terms.

The total admissions were thus 940. Out of these 80 died and the rest were given to cultivators and others. Out of 278 received on terms only 11 died.

From the fund raised by Mr. Lely to relieve the famishing cattle Rs. 1,698 were allotted to this camp and Rs. 1,786 were received as donations. The Government further assisted the camp in the following particulars:—

	Rs.	a.	p.
(1) Establishment	1,115	9	7
(2) Feeding	600	0	0
(3) Price of fodder	11,814	14	1
Total ...	13,530	7	8

The total costs of the camp amounted to Rs. 17,000 or about Rs. 25 per head. The total amount realized on account of the camp by Government was Rs. 12,289-12-10. There was thus a loss to Government of Rs. 1,140-10-10 in saving 860 head of cattle, or about 1½ rupee per head. There was no epidemic in the camp and mortality was about 8 per cent. on the whole and only 4 per cent. among the cattle received on terms.

Another experiment was made for saving cattle by sending them to reserved forests. Mr. Gibb, Collector of Ahmedabad, raised a fund of Rs. 11,419-4-0 and got Rs. 10,000 from the City Permanent Relief Fund for paying the railway fare of the cattle sent to Thána.

2,606 cattle were sent to the Thána District and only 595, *i. e.*, less than 25 per cent., came back and the rest were lost. 1,164 were sent to Dharampur, out of which 768 came back. Thus out of 3,670 cattle only 1,363 came back. The rest died on account of change of climate, want of proper care and other causes.

The cost of saving these 1,363 head of cattle was Rs. 19,139-6-3 besides fodder charges and again the cattle that came back were not in so good a condition as those that survived in the cattle camp.

I am, therefore, of opinion that on the whole cattle camps proved a great success.

67.—Government supplied compressed grass to affected places in Gujarát from the Thána and Khándesh Districts and from the Central Provinces. Depôts were established in central places whence grass was sold to poor cultivators at Rs. 10 per 1,000 lbs. Mámlatdárs and higher Revenue officers after making enquiries issued chits to poor cultivators, who were given grass accordingly by the depôt-keepers. After March grass was sold to poor cultivators at Rs. 2 per 1,000 lbs., the remaining Rs. 8 being paid out of the Charity Funds.

80.—When the distress became acute, for the benefit of the inhabitants of surrounding villages, who earned their daily bread from the sale of small bundles of fuel, grass, etc., as also for the relief of the labourers, the comparatively respectable poor and the artisans of the city, the City Permanent Relief Fund Committee decided to open a cheap grain shop under the management of the late Sheth Manibhái Premábhái and myself. Rs. 10,000 were sanctioned for this purpose, and the shop was opened outside the Kálupur Gate on 23rd August 1899, which was afterwards transferred to Sheth Mansukhbhái's Wanda in the city. Grain of the value up to 8 annas per head was sold every day. Different yards for different sorts of grain were made and tickets for values up to 8 annas were sold at the door of the compound. The holders handed over the tickets to the weighers who took back the tickets and gave the grain for the value mentioned therein. Supervisors were kept to see that no fraud was committed. In the beginning the rush was so great that two sets of weighers were employed—one from 8 A. M. to 1 P. M. and the other from 2 P. M. to 6 P. M. Current account was opened with the Bombay Bank on the security of the Committee's promissory notes. Besides this Rs. 25,000 were given as loan without interest by private individuals.

The shop was at work for 194 days and was closed on 5th March 1900.

The quantity of grain purchased was 110,492 maunds and 10 seers for Rs. 2,25,911. Interest and other expenses amounted to Rs. 1,704-5-0. The price realized was Rs. 2,21,221-2-1. The loss on the whole was Rs 6,394-8-10. The average number of purchasers was 3,000 daily. The grain at this shop was sold about 2 lbs. cheaper than the petty grain shops did. The shop was much appreciated and availed of by the people.

81.—The cheap grain shop opened by the City Permanent Relief Committee did not in any way

discourage the importation of grain. As a matter of fact there was no competition between the importers and this shop, because there was no appreciable difference between the wholesale rate and the shop rate, and also because grain sold at the "Relief shop" was limited to 8 annas worth to an individual.

102.—Very few orphans remained in this district to be disposed of by officials at the end of the famine, as during the course of its existence orphans and deserted children were taken away by or sent to Missionary agencies from the poor-houses. A large number of orphans were taken away from this place by Missionary agents to distant places. This practice was stopped by the Commissioner when he came to know of it and an orphanage at Government expense was started. Missionaries have started orphanages in this district and have taken care of hundreds of orphans. The authorities require a writing from those who take away the children not to remove them to a distant place, to return them to their relatives, if demanded, and not to make converts of them before they attain majority.

Except the Mahipatrám Ruprám Orphanage started in 1893 and managed by a committee under my supervision, there is no native institution for the maintenance of orphans. This orphanage admitted famine orphans sent by officials and other people from all parts of Gujarát, the numbers in the institution at one time coming up to as many as 800. After the rains, however, many children went back to their guardians and relatives, the present number being 322.

104.—Yes. Particularly as regards grass traffic. People bitterly complained that they could not get trucks and rumours of the corruption of the station staff were current.

It was also complained by the importers of fodder that though the Railway Company nominally reduced their rates per maund, they fixed a minimum of 81 maunds for a covered truck and 98 for an uncovered one. As these trucks were not capable of holding the minimum fixed for unpressed fodder and as individuals could not get their stocks pressed, they had to pay for more than the actual quantities imported. Local prices were not affected in Ahmedabad by the inability of the Railway Company to supply the rolling stock sufficient to meet the unexpected demand.

105.—During the famine no complaints were heard as regards the difficulty in obtaining labourers. On the contrary, agricultural and other classes of labourers were to be had at any time and at a very cheap rate. They often preferred private work to relief works, as payment in grain or cash was daily made in the former case.

At the close of the famine and after the rains complaints were heard in some villages that sufficient agricultural labourers could not be found, as many in the village had died or not returned from other places and relief works owing to late rains.

LA'LSHANKAR UMIA'SHANKAR,

Judge, Small Cause Court, Ahmedabad.

Ahmedabad, 12th January 1901.

Mr. M. Visvesvaraya.

Answers by Mr. M. Visvesvaraya, Executive Engineer for Irrigation, Poona, to questions drawn up by the Famine Commission.

Explanatory Notes.

1. The answers are numbered in the order of the questions to which they relate as given in the printed list issued by the Famine Commission.

2. Where no answers are given, it may kindly be understood that the questions relate to matters not within my cognizance.

Introductory.

1. The outlook when the rains of 1899 commenced was more or less unsatisfactory in the eastern half of the Poona District. The principal harvest in this area is *rabi* and this had not been up to the average in the two preceding years. In other parts of the district the outlook was fair, but the district as a whole had not recovered from the effects of the famine of 1896.

3. Rainfall in the Poona District :—

	Whole District.		Eastern half of district which is the area of uncertain rainfall.	
	In.	cts.	In.	cts.
(*a*) Average monsoon rainfall (11 years' average from June to October inclusive)	37	86	19	87
(*b*) Actual rainfall in the rainy season of 1899	16	05	10	89
(*c*) Percentage of (*b*) on (*a*)	42	0	55	0

(*d*) Distribution of average and actual rainfall :—	Average.		Actual.		Average.		Actual.	
	In.	c.	In.	c.	In.	c.	In.	c.
June	7	35	6	37	4	31	3	38
July	12	60	2	72	3	39	0	36
August	7	27	2	23	1	81	0	39
September	6	67	4	20	6	33	6	56

4. I have no special information on this point, but, from enquiry and observation at the time, I understood that in the western half of the district, which is the area of favourable rainfall, the percentage was 30 to 40 and in the eastern half, which is the area of uncertain rainfall, it was 10 to 15.

5. I roughly estimate that (*a*) petty cultivators from 40 per cent. and (*b*) labourers about 10 per cent. of the total population. The percentage of labourers has risen considerably since the famine of 1896.

Preliminary Action.

6. The necessity of relief became apparent from a general failure of the crops and it was also proved by test works.

7. The observed facts were a rise in the prices of food-grains, great demand for work, desertion of villages in search of work, increase of mendicants, sale of cattle in large numbers, and thefts of articles of food in parts of the district.

8. Test works were opened at first. The Shetphal Tank Work in my charge was one of the earliest test works opened in this district.

9. Programmes of relief works were ready and the works entered in the programmes had been located, and surveys and estimates of cost had been made out beforehand. New works were projected as soon as famine was declared.

10. The relief programme contemplated large public works as the backbone of the system.

14. Irrigation wells can be made in parts of this district, but many of these are useless in a year of draught unless they happen to be near an irrigation canal and fed by percolation. Where irrigation was practised under wells during the famine, the area cropped was very small.

16. On test works, the tasks noted in the Famine Code were exacted. These were different according to sex and age, but no regard was paid to the previous occupation of the workers.

17. Payment was made in strict proportion to results, but the rates included a rest-day wage allowance, and so long as there was no kitchen on the work, an allowance also for dependants.

18. When people were found flocking to a test work, notwithstanding that the payment they received was a bare subsistence wage, it was considered a sure proof of distress, and test works were accordingly converted into regular relief works.

Large Public Works.

19. Large public works were opened at first, chiefly those which had been left incomplete at the close of the famine of 1896-97.

20. Under Officers of the Public Works Department. No scale of supervising establishment had been prescribed in advance. The regular local establishment of the Public Works Department was made available as far as possible.

There was no delay in opening the works. The tools and plant maintained for ordinary works were utilized at first and supplemented by purchases as necessity arose.

21. The tank works in my charge were divided into charges or sections, each comprising a maximum of 3,000 workers (*vide* Annexure A).

The maximum number which each work can employ was known and fixed, and if it was ever exceeded the excess number was drafted to the nearest work on which there was room.

22. Each charge had its own establishment. On tank relief works there was usually one Upper Subordinate of the Public Works Department establishment in supervising charge, who also had his regular departmental duties to perform besides, and one or two Lower Subordinates belonging to the permanent establishment.

The remaining establishment was all engaged for the occasion. This consisted of:—

1	Sub-Overseer for about every	3,000	workers.
1	Cashier do.	3,000	„
1	Maistry do.	1,000	„
1	Mustering kárkún for	250 to 300	„
1	Measuring and check kárkún for about	750	workers.

Reference is requested to paragraph 8 of Circular marked A.

Appendix IV of the Bombay Famine Code prescribes the arrangements necessary for hutting the people, sanitation, water-supply, etc., and the directions given there were closely followed.

Conservancy and sanitation were looked after by the Special Civil Officer with the aid of a kárkún and a gang of coolies.

23. Admission to the camps was free to all who were ready to submit to the labour test. This was in accordance with the wishes of the Famine Commission of 1898.

When too many people came to a relief work from the nearest villages, the able-bodied among these were singled out and drafted to distant works.

Residence in camps was made compulsory when there was sufficient hutting accommodation, except in the rainy season and during the prevalence of epidemics.

24. The area which a large public work capable of accommodating about 10,000 wokers can serve depends on the density of the population, their normal occupation, and the severity or otherwise of the famine. In the eastern parts of the district consisting of an agricultural population sparsely distributed, the area served may be taken as that enclosed within a radius of 20 miles and the population, say, 120,000.

Both in the early and the closing days of a famine such a work may serve for about twice the area and population mentioned above, if workers are concentrated on large relief works, though the tendency then is to demand work nearer home.

Applicants for relief went more than 50 miles in search of relief, and as many as 80 miles from their homes when drafted.

In times of acute distress, people are willing to go any distance provided relief is assured at the destination. People from the eastern parts of this district have migrated to Khándesh and the Berars in search of employment since the failure of the rabi rains of 1900.

25. The construction part of a relief work was managed entirely by the Public Works Department. The maintenance of the kitchen and gratuitous relief were under the supervision of the Civil Authorities. The Public Works Officers were subordinate to the Civil Authorities in the matter of selection of relief works, opening and closing them, drafting workers, enforcing compulsory residence, prescribing the system of work, that is, whether task or piece-work, and in all matters connected with the general administration of relief. They worked independently of the Civil Authorities in all matters of detail as well as in all matters connected with construction, tasks and wages.

26. There was a separate Civil Officer for each important charge. He was selected from the class of officials on the Collector's establishment who were looking forward to promotion to the rank of a Mámlatdár or Mahálkari. His salary on my works was Rs. 75 per month, including conveyance allowance, and he was subordinate to the local Public Works Subordinate who was the "officer in charge."

The Special Civil Officer had full authority to assure himself that the orders of Government were being followed in all matters mentioned in the paragraph referred to, in respect of dependants and the gratuitously relieved. He had similar authority in the case of relief workers also, except in regard to (1) calculation and payment of wages, and (2) submission of accounts and reports. These duties were performed by the local Public Works Officer.

27. No. All such matters were decided by the local Public Works Officer under the orders of the Executive Engineer of the district.

28. A gang contained 40 to 50 workers consisting of men, women and children.

Gangs were formed of people belonging to the same family, village or caste as far as possible. When some workers left, the new workers who replaced them were also selected from the same village or caste as far as possible. This arrangement worked well and seemed to be popular with the workers.

29. The classification of labourers followed was that laid down in paragraph 70 of the Bombay Famine Code (1900 Edition) which, for earthwork, is identical with the classification of paragraph 445 of the Report of the Famine Commission of 1898.

The wage scale adopted is that prescribed in paragraph 109 of the Bombay Famine Code, which is practically the same as the one laid down in paragraph 456 of the Report of the Famine Commission of 1898.

Experience shows that the classification and wage scale laid down are judicious and there is no justification for a departure.

30. Weakly men and all women were classed as carriers and paid accordingly. The absence of any

distinction in the classification and wages of men and women caused no difficulty.

One result perhaps was a large increase in the number of women on relief works as compared with men.

31. During the test work stage, the system adopted was that of payment by results. On the Shetphal Tank work, the Code system was introduced on its conversion to a regular relief work and both systems work side by side to this day. The piece-work system is applied to professional labourers and other gangs of healthy workers, and the task work to the weakly, the inexperienced and the friendless.

Both systems are carried on simultaneously on the two tank works in my charge at present.

32. I do not think that the system of payment by results is altogether unsuited to the conditions in acute distress though it will not answer by itself at such times. I have had the system working side by side with the Code system in the most acute stages of the famine, with, I consider, satisfactory results. Professional labourers and many who have been on a relief work for some time without loss of condition have worked contentedly under such a system.

In acute distress, the Code system is indispensable as there will be many people unfit for any kind of labour for some time afer they come on a work. There may be a sudden increase of numbers and not enough room for all. The Code system is best suited for all such emergencies and so cannot be dispensed in the acute stages of a famine.

33. A table of tasks based on Mr. Higham's formula was prepared at the outset and it was superseded by the standard tables issued by Government under Government Resolution No. F-538, dated 5th March 1900. As the works in my charge were tank works, there was no occasion to send the workers to work at a distance from their camps. Subsequent changes in the tasks were in the direction of leniency due to the nature of the material excavated and carried, intense heat or unfavourable weather, prevalence of epidemics, and other similar causes.

34. The scale of wages was adequate to maintain the workers without loss of condition if the wages were spent judiciously. But it happened, there were always some who spent their wages freely at the beginning of a week and starved the last day or two before the payment day.

I have had no evidence that the workers saved upon their earnings. Enquiries show that it was impossible.

Copper coin returned freely to the Banias. This was noticed because the Banias returned the copper to the cashiers.

35. Rest-day allowance was given and this is preferable.

36. The minimum wage is just sufficient for the purpose for which it is determined, but is not too high. But in the case of contumacious able-bodied workers, fining may be continued to the penal wage and even to a lower limit down to proportionate payment for work actually done. Such fines have a special value for enforcing discipline.

37. The minimum wage was not paid for the first week or two. The maximum wage was given for that period when the workers were new and unused to labour, but if they failed to perform the full task after that period they were fined down to the minimum and afterwards to the penal minimum (this last has been resorted to since its introduction under the orders of Government in the month of March 1900). Very often the workers appeared satisfied with the minimum wage and seemed not to try to earn more. This happened in the case of people not much used to labour and who resorted to the relief works after all their resources had been used up. When they came to the work, they were more or less in a state of despair and had no spirit to work.

38. Payments were made as a rule weekly, and oftener (though rarely) to needy new-comers; but more frequent payments than a week are not desirable; neither are they practicable without a disproportionate increase of establishment.

39. Payments were almost always made weekly and rarely oftener. Payments were ordered to be made to new-comers daily or bi-weekly for some time when specially recommended by the Special Civil Officers. It was observed that those who had no resources of their own were thrown into the debt of either the head of the gang or the Bania.

40. Under the Code system, payment is always made to the individual. Under the system of payment-by-results, payment was made to the headman for a time, precaution being taken to see that he distributed the wages equitably. At present, payment under both systems is made to the individual and not to the headman of the gang.

Payment to the individual is always the most satisfactory method to follow on a relief work.

41. The following figures relate to the two tank works in my charge at the time of greatest pressure :—

Name of work.	Numbers of Workers who earned			Total workers.
	(*a*) Full wage.	(*b*) Penal wage.	(*c*) Wage between the full and penal wage.	
Shetphal Tank ...	2,186	144	8,612	10,942
Khamgaon Tank ...	346	*Nil.*	2,950	3,296

Workers did not remain long on the works on the penal wage, but tried to earn more, or left if they had other resources.

42. The system of payment-by-results followed was the one described as the "Bombay system of limited piece-work" in paragraph 212 of the Report of the Famine Commission of 1898. In calculating the rates, allowance is made for the rest-day wage, but not for dependants as there are kitchens attached to all regular relief works.

43. The maximum wage paid was the grain equivalent of—

19	chataks for	diggers,
16	do.	carriers,
10	do.	children,

as given in paragraph 109 of the Bombay Famine Code. Children as well as infirm adults were fed in the kitchen; weakly persons capable of some work were classed with others, if a gang would have them, and were paid the minimum wage irrespective of task performed; otherwise, they were ganged separately and paid full wage for a time till they regained their normal health when they were treated like ordinary workers. I should prefer, for this class of workers, task work with a minimum wage where the choice lies between that and piece-work at favourable rates.

Persons who were very weak and could not be expected to do a fair share of the appointed standard tasks were included among the "gratuitously relieved" sub-class "nominally worked." They were given light work, such as sweeping famine camps, and paid the minimum wage by the Special Civil Officer.

44. No contractors were employed on my works at any stage of the famine.

45. Payment was made on bills at first and precautions taken that the wages were distributed properly to the individual workers. Since the issue of a ruling by Government (*vide* Government Resolution No. 3319 of 14th September 1900) that individual registers and individual payments cannot be dispensed with, muster rolls have been maintained and payments made on them. The percentage of full wage earned is determined in each case by the proportion of work done to full task by the whole gang as exhibited in part 3 of muster roll.

A copy of a muster roll showing actual transactions is attached.

46. The prices scale was obtained by the Public Works Officer from the Special Civil Officer. It was based on the price of the cheapest grain in the market in general use among the workers. This was either jowári or bájri, for the most part jowári on my works in the eastern part of the Poona District.

47. When it was decided to open a relief work, an officer capable of managing it was selected and deputed to make all preliminary arrangements such

as collecting tools, setting out work, selecting sites for relief camps, offices, stores, kitchen, hospital and drinking-water wells. Intimation is given of the opening of the work to the Sanitary Commissioner or the District Medical Officer to enable the officer concerned to arrange for the opening of a hospital and to advise in the matter of sites for camps and other sanitary matters. The various steps adopted in opening a relief work are described in the Code as well as in my office circular on Tank Relief Works, marked A, attached.

Measurements are taken by the maistries assisted by measuring kárkúns, a proportion being checked by a subordinate. Payments are made by cashiers in the presence of the Public Works Officer, Special Civil Officer and other subordinates on the works.

48. The task and wages were determined by the Local Government in Government Resolution No. F.-538, dated 5th March 1900, and the Superintending Engineer of the Division was empowered to reduce the tasks by a fixed percentage on due cause being shown. The Commissioner had powers to issue orders subject to confirmation by Government. The action of the Collector of this district was generally upheld by the Commissioner and Government whenever he acted in anticipation of sanction.

51. People were not drafted from a large public work to a small village work within my knowledge; but when there was overcrowding on a work or occasion to break up a camp, they were drafted from one large work to another. The drafting usually resulted in a reduction of numbers.

59. I have had no opportunity of supervising small village relief works; but it has often occurred to me that a considerable extension of small village works was possible. I will here briefly explain my plan.

(1) At the beginning of a famine, test works should be opened and arrangements made for gratuitous relief as at present.

(2) As soon as the magnitude of the calamity can be gauged, I should have only two classes of relief works, namely :—

(*a*) Large public works.

(*b*) Village relief works.

(3) From past experience and a knowledge of the economic condition of the people, a rough but tolerably reliable estimate can be formed of the total cost of relief in the whole district for, say, six months. That amount may be distributed by villages which should be informed that relief should be restricted within the sums allotted to each.

The present population of the Poona District is about 11,00,000 and the number of villages, say, 1,200. The estimated expenditure for village relief may be, say, 4 lakhs of rupees for six months

and probably one-third of the number of villages will not require any relief at all. The average famine expenditure per village will be about Rs. 500. Allotments may be made by villages or circles in proportion to the population.

(4) A scheme of village works may be drawn up to include:—

(i) Making new cart tracks and nala crossings.

(ii) Building small tanks.

(iii) Excavating wells.

(iv) Levelling up roads and paths in and around villages and filling pits and improving the sanitation and general appearance of the neighbourhood of the villages.

(v) Digging pits for new plantations and forming manure pits, and others.

(5) The amount of weekly payment being fixed, the most destitute and weakly should be selected for employment on such works by the village *punch*.

(6) The advantages of the scheme are that people will be able to live on little in their own houses, there will be no disorganisation of family or village life; and, at the commencement of the following monsoon, they will be on the spot to resume their ordinary occupations. The sanitation of the village will improve considerably and people will learn the value of self-help in carrying out village improvements. The village will present a cleanly and smiling appearance after the first favourable monsoon succeeding the famine.

(7) I should have three or four large public works also open simultanously in different parts of the district so that, if in any circle distress increased, able-bodied families may be transferred to such works, thereby making the village allotments suffice for those left behind.

(8) Payments in the villages should as far as possible be made in the presence of the *punch* and supervised by Government agency, one kárkún or cashier being employed for about 20 villages.

My answer to this question is already long. I have discussed the scheme with several Government officers, and the only objections raised have been the difficulty of supervision of village works and payments. This difficulty is not insuperable and the plan offers important advantages. It will save immense suffering. Cultivation will be resumed at the earliest opportunity. At present Government do not derive a return of even 25 per cent. for the huge relief expenditure, in the way of normal cost of work done, while the expenditure on hutting and drafting brings no return whatever. Gratuitous relief now given on large relief works may as well and with better effect be given at the homes of the applicants. People will live contentedly in their villages on a much lower wage than on regular relief works as they have their own huts, clothing and other slender re-

sources to supplement the wage. The relief operations will then consist of 3 or 4 large relief works for each district and numerous small village works and will in a manner be simplified. I attach much importance to the beneficial results of such a system both from the point of view of mitigation of suffering and humanity and as the speediest means of restoring the prosperity of the affected tract and the tax-paying capacity of the people.

87. The number in receipt of relief in the Poona District at no time exceeded 15 per cent.

88. Measures were taken by the Civil authorities to afford adequate relief throughout the famine. Relief may have been excessive for a time in the villages close to a large work and defective in distant villages by reason of the facilities or obstacles placed by the distance. But there was room on the large works as a whole and admission was free to all who cared to apply.

89. I estimate that at the time of the greatest pressure on the two works in my charge, about 70 per cent. of the workers were petty cultivators, chiefly Maráthas and Máhars.

90. Yes. The reasons are familiarity with Government relief and increase of destitution brought about by crop failures for several years in succession.

91. The Baṅias and Sávkars did not lend money to the ordinary cultivators as usual.

The great majority of the workers come to works after exhausting their resources.

92. Not quite sufficient.

93. Some sort of distance test, drafting and compulsory residence are already practised. No method of selection for admission to relief is practicable as it is impossible to guard against fraudulent practices.

94. On each large work, the births and deaths are registered by the Medical Subordinate in charge of the hospital.

95. Some deaths may be the result of diseases acting on constitutions weakened by unsuitable or insufficient food.

96. On tank works, there was no difficulty in obtaining pure water. Guards were employed to prevent workers drinking unwholesome water. Permanganate of potash was used to disinfect wells at intervals of about one month.

97 (*a*) Separate trench latrines for males and females were provided as laid down in Appendix IV of the Code.

(*c*) Similar arrangements were made at the kitchens.

For non-working children, latrines were formed by spreading sand on a level ground or platform suitably enclosed.

Both (*a*) and (*c*) were supervised by the Special Civil Officer.

98. Yes, by the Special Civil Officer and the Medical Officer. At the beginning, inferior grain was noticed in some of the shops, but one or two warnings were found sufficient to prevent a repetition of the offence.

99. Workers had no excess to wild products worth mentioning near my works.

100. There was no large immigration from Native States to my works. At the time of greatest pressure, the number of immigrants was about one per-cent. of the total.

101. The mortality among the immigrants from Native States was not appreciably greater than among other workers.

102. In the eastern part of this district, the famine has not yet ended and the orphans are not yet finally disposed of. They are maintained at the kitchens and poor-houses.

105. At the time of the last kharif harvest, some complaints of this nature were heard from agriculturists in the neighbourhood of large works. The reason, however, was that the harvest itself being poor, the cultivators offered unusually low wages which were not sufficiently tempting to the labourers.

I heard no complaints from any others. There was demand for work everywhere.

106. No appreciable change to my knowledge.

107. Cash wages have not risen in sympathy with the rise in prices in this district.

108. The provisions of the Bombay Famine Code have been very closely followed.

The following are the only departures, if they may be so termed, from the provisions which apply to large relief works with which I am concerned.

(i) Paragraph 81, Bombay Famine Code.	Piece-work system was employed. The head of a gang was paid for a time. At present individual payments are the rule, even under piece-work.
(ii) Paragraph 82.	Payments are made weekly as a rule as already explained.

109. None of the officers of the classes named were employed on my works.

110. I have had no experience of non-official agency during the famine.

111 (*a*) A change from the Code task to payment-by-results system had the following results :—

(1) Reduction of people seeking relief. (This change helps to weed out people who have resources of their own).

(2) No appreciable increase of death-rate was noticed as people found in a reduced condition were put on task work and in extreme cases fed in the kitchen till they regained their normal health.

(*b*) Increase of tasks often led to reduction in numbers, but how far it added to the death-rate it is difficult to say. When the tasks were considered excessive, reductions were made with the sanction of the Superintending Engineer, C. D., according to the circumstances of each case.

(*c*) The wage scale in this district as laid down in the Code has been found to be adequate. The scale at the commencement of famine was even more favorable and perhaps erred on the side of liberality.

(*d*) The mode of calculating fines is explained in Government Resolution No. F-1802 of 23rd August 1900. Any relaxation in the mode of calculating fines will doubtless make the work popular and lead to increase of numbers.

(*e*) All the tests of necessity resulted in a decrease of the number of people seeking relief and may probably have added to the death-rate owing to the ignorance of the workers.

Some people left the works in disgust whenever changes were made to their disadvantage, but they generally came back after a time.

112. All the evils mentioned must follow to a certain extent on the occurrence of a famine, but not necessarily on account of the massing of people on large works. On large works, such evils may be considerably mitigated by suitable arrangements, in the camps and in forming working gangs, so as to ensure that members of the same family, village and caste are kept together as far as possible.

M. VISVESVARAYA, B.A., A.M.I.C.E,
Executive Engineer for Irrigation,
Poona District.

Poona, 12th January 1901.

ANNEXURE A.

POONA IRRIGATION DISTRICT.

Tank Relief Works.

Applicants for relief are received at a place marked by a red flag.

Admissions. A kárkún working under the orders of the Special Civil Officer receives them and separates workers from non-workers. The latter are detained at the kitchen and their names are entered in the muster rolls of the gratuitously relieved.

For workers, an admission note is prepared in which the name, village and caste and the class under Section 70 of the Famine Code to which each applicant is admitted is entered. The note is signed by the Special Civil Officer and the new-comers go with the note to the camp kárkún whose place is marked by a white flag. The camp kárkún directs them to one of the camps which is to form their future residence, and after they leave their kit in the camp, they are admitted to one of the sections of the work.

Each section of the work contains about 3,000 workers.

The sectional officer, who is usually a Sub-overseer, appoints the new-comers to a gang and they are then mustered and set to work.

New-comers who arrive in a reduced condition are given a dole in dry grain or a meal in the kitchen on the day of arrival before they are set to work.

Classification. 2. In admitting new arrivals, the sectional officer accepts the classification entered in the admission note by the Special Civil Officer. The classification is however revised, if necessary, when a fresh muster roll is drawn up at the commencement of a new week according to the experience gained of the worker's capacity in the interval.

Persons admitted on relief works are classified, according to Section 70 of the Code, as follows:—

I—Workers.

(*a*) Special Class.
(*b*) *Class I.*—Diggers.
(*c*) *Class II.*—Carriers.
(*d*) *Class III.*—Working children.
(*e*) Nursing mothers who work.

II—Gratuitously relieved.

(*f*) Special Class.
(*g*) *Class IV.*—Nominally worked.
(*h*) *Class IV.*—Non-working adult dependant of workers.
(*i*) *Class IV.*—Other non-working adults (not dependants of workers).
(*j*) *Class IV.*—Non-working nursing mothers.
(*k*) *Class V.*—Non-working children.

As a rule, all workers are paid by the Engineer Officer, and the gratuitously relieved are paid or fed by the Special Civil Officer.

Workers of the special class under each head are selected and paid by the officers concerned.

Tasks. 3. Wages are regulated under Section 76 of the Code by the amount of work performed. Until otherwise ordered, work will be carried on partly on the piece-work system and partly on the Code system of task work.

Tasks are appointed and piece-work rates determined according to the tables sanctioned in Government Resolution No. F-538, dated 5th March 1900. Under special circumstances, reduction in the tasks are sanctioned by the Superintending Engineer, Central Division.

Fines are inflicted for short work according to Government Resolution No. F-581 of 9th March 1900. Each gang is under a mukádam and consists of about 50 workers—men, women and children being associated in due proportion. Detailed measurements of work done by each gang are recorded daily and payments are calculated on the six day totals with the rest-day wage added.

A special table of rates is sanctioned by the Executive Engineer varying with the grain rate from time to time. The table is based on the tasks sanctioned by Government for the principal item of earthwork and includes special rates for numerous minor items of work connected with the construction of a large earthen dam.

Task workers, though tasked in gangs, are paid individually. When a gang does less than 50 per cent. of the appointed task, all able-bodied adults are fined down to the penal wage.

Special concessions are made and fines are reduced in the case of new-comers or when the proportion of able-bodied adults in the gang is small, generally the gangs are so constituted as to include a due proportion of able-bodied workers.

Piece-workers are paid strictly in proportion to work done. Although payment in the case of piece-workers is made to the headmen, the individual earnings are calculated and each worker is informed what his or her share amounts to. A gang which does less than 50 per cent. of the appointed task is transferred to the class of task workers, so that the feeble may have the benefit of the minimum wage rule.

Payments.

4. Payments are ordinarily made weekly. The muster rolls are opened on Thursday morning and closed on the following Wednesday evening. They are checked and handed over to cashiers on Thursday and payments are made on Friday and Saturday.

New-comers recommended by the Special Civil Officer are paid daily or twice a week as far as possible till the end of second week after their arrival.

Complaints of short payments are investigated personally by the Engineer Officer and the several sectional officers in charge of gangs. One selected office kárkún is also sent round on pay day to enquire into complaints and explain to workers the reason of short payments, when they do occur, and also to encourage and advise workers to earn the full wage by performing the full task.

The Engineer Officer and the Special Civil Officer shall each witness personally at least 10 per cent. of the total weekly payments.

Treatment of dependants.

5. Dependants live in the same huts with the workers to whom they are related. The six classes of the gratuitously relieved, detailed in paragraph 2 above, are dealt with as follows :—

(*f*) Are chosen for grinding corn, cooking or other special work and are paid at rates sanctioned for their class by the Code or by the circulars of Civil authorities.

(*g*) Are given light work, such as sweeping camps, and are paid in cash by the Special Civil Officer.

(*h*) Are fed in the kitchen.

(*i*) Are fed in the kitchen for a few days and as soon as they improve are sent to their home to be put on the village dole. If they have no definite home, they are sent to a poor-house.

(*j*) Fed in kitchen and a pice is paid daily or milk given for the child in arms.

(*k*) Fed in kitchen and kept in one enclosure near the kitchen during daytime.

Such of the nominally worked as arrive in a reduced condition are given notes to a Bania for advance of grain till arrival of pay day.

Adult dependants who are not worked are transferred to the "nominally worked" class as soon as they improve in health and are capable of doing some light work.

Similarly as the "nominally worked" improve they are transferred to Class II or Class III of workers as the case may be, after inspection by the Medical Officer.

Drafting.

6. Workers are drafted from one relief work to another under the general or special orders of the Code or and the Executive Engineer concerned. The Special Civil Officer of the work from which the draft is to be sent should previously communicate with the Special Civil Officer of the work to which the draft is to go, and there should be a clear understanding as to the time and number to be drafted.

Each draft should be accompanied by one or more maistries or kárkúns and the chief official in charge of the draft should take with him the following documents :—

(1) A nominal muster roll of workers and dependants arranged according to Code classes and signed by the Special Civil Officer.

(2) A copy of the order of the Collector or Executive Engineer and copy of the letter of the Special Civil Officer of the new work accepting the draft.

(3) A memorandum showing the date up to which payments have been made, the number of days allowed for marching and the date on which the gang is due on the new work.

On arrival on the new work, workers are paid by the Engineer Officer and non-workers are relieved by the Special Civil Officer.

When the Sunday intervenes during the marching time, the persons drafted should be asked, before they leave, whether they prefer to march or to rest on the Sunday. If they

elect to march, they shoul be paid the maximum wage for Sunday; if not, they will receive the usual rest-day wage.

A note should be made as to the understanding with the workers in this respect, in the memorandum sent with the draft.

The instructions in this paragraph are in accordance with the circular issued by the Executive Engineer, Poona District.

Camps and hutting.

7. The camps should be laid out and managed generally in accordance with the directions in Appendix IV of the Code. Ordinarily, persons of the same village or táluka and caste are allowed to camp together. Each camp is capable of accommodating about 1,000 workers, and the camps are distributed about a quarter of a mile apart.

The number of huts to be provided for relief workers is fixed by the Collector.

Near each camp is a well from which water is drawn for potable purposes into tanks or cisterns and distributed from them to workers. Trench latrines are provided for men and women separately. They are dug and filled after use daily.

Workers and dependants are allowed to wash and bathe at certain appointed pools or wells by carrying water to the bank where waste water is led away into drains after use.

On each camp of 1,000 persons the following establishment is maintained :—

1 Watchman to watch the materials of the huts and the camp generally.
2 men to dig trenches for latrines.
1 man to fill the same.
1 man to watch the well and attend to the distribution of water.

Besides the above, the Police Superintendent appoints night watchmen for each camp who are paid at one-and-half times the wage of relief workers of Class I.

Miscellaneous.

8. The following scale of establishment is found sufficient for construction purposes for a section of earthen dam giving employment for about 3,000 workers :—

Class or designation.	Number required for 3,000 workers.	Remarks.
Sectional officer (usually an overseer, sub-overseer or maistry)	1	An additional maistry is employed occasionally if any section of the work requires special technical supervision.
Cashier	1	
Mustering kárkú	9	For surveys and for replacing members sick or on leave extra hands are entertained, depending on the total numbers of workers.
Tasking or measuring kárkúns	3	
Miscellaneous kárkúns	1	
Khálasi	1	

The total numbers of hours of work are 9 daily as ordered by the Superintending Engineer, Central Division. The intervals of work and rest are regulated according to the season.

The commencement and closing of the work is announced by a bell or bugle.

Musters are to be prepared and filled daily according to the Superintending Engineer, Central Division's Circular No. D-16 of 21st January 1900.

In the matter of payments and preparation of accounts, the Executive Engineer's Circular No. 208 of 9th January 1900 should be followed.

M. VISVESVARAYA, A.M.I.C.E.,
Executive Engineer for Irrigation,
Poona District.

ANNEXURE B.

District—Poona Irrigation.

Sub-division—Nimbgaon.

Departmental Head—33 Famine Relief.

Service Head—Irrigation Major Works.

Period—From 6th to 12th December 1900.

Rate of grain 22 lbs. and 21 tolas.

Piece-work.

NOMINAL MUSTER ROLL OF FAMINE LABOUR EMPLOYED ON SHETPHAL TANK.

I. Headwork—6 Earthwork. Earthen dam 9-0-6.

PART I.—*Nominal Muster Roll.*

B 1335—5

Descriptions.	No.	Name and Father's Name.	Caste.	Residence.	December 1900. 6th.	7th.	8th.	10th.	11th.	12th.	Total.	Daily Rate.	Amount.	Add for Sunday (rest-day) Payments.	Total.	Percentage.	Balance due.
												Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.	Rs. a. p.
		Mukadam.															
Special Class ...	1	Sadhu bin Narsu	Mali	Kati	×	×	×	×	×	×	6	0 2 3	0 13 6	0 1 0	0 14 6	·64	0 9 3
		Men.															
Class I	1	Bala bin Bhawani	Dhangar ...	Narsingpur ...	×	×	0	0	0	0	2	0 1 9	0 3 6	0 0 6	0 4 0	...	0 2 6
	2	Khandu bin Bhawani	Chambhar ...	Jamb	×	×	×	×	×	×	6	...	0 10 6	0 1 0	0 11 6	...	0 7 3
	3	Malu bin Sambhu	Do. ...	Do. ...	×	×	×	×	×	×	6	...	0 10 6	0 1 0	0 11 6	...	0 7 3
	4	Kondi bin Narayan...	Do. ...	Do. ...	×	×	×	×	0	0	4	...	0 7 0	0 0 6	0 7 6	...	0 4 9
	5	Daji bin Rukhmaji	Dhangar ...	Kati	×	×	×	×	×	×	6	...	0 10 6	0 1 0	0 11 6	...	0 7 3
				Total ...	5	5	4	4	3	3	24	...	2 10 0	0 4 0	2 14 0	...	1 13 0
		Men.															
Class II	1	Bala bin Bhiva	Chambhar ...	Sirpur ...	×	×	×	×	×	×	6	0 1 3	0 7 6	0 1 0	0 8 6	...	0 5 6
	2	Madhaba bin Genu	Dhangar ...	Do. ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
				Total ...	2	2	2	2	2	2	12	...	0 15 0	0 2 0	1 1 0	...	0 11 0
		Women.															
Class II	1	Naba kom Baji	Chambhar ...	Kati	×	×	×	×	×	×	6	0 1 3	0 7 6	0 1 0	0 8 6	...	0 5 6
	2	Jana kom Babaji	Mali	Sengnapur ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	3	Zinga kom Bhawani	Chambhar ...	Narsingpur ...	×	×	×	0	0	0	3	...	0 3 9	0 0 6	0 4 3	...	0 2 9
	4	Chagana kom Kondi	Do. ...	Do. ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	5	Babai kom Sadhu	Mali	Kati... ...	×	×	0	0	×	×	4	...	0 5 0	0 0 6	0 5 6	...	0 3 6
	6	Ranu kom Mahadu	Chambhar ...	Narsingpur ...	×	×	×	0	0	0	3	...	0 3 9	0 0 6	0 4 3	...	0 2 9
	7	Babai kom Vithoba	Do. ...	Kati	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	8	Paru kom Kesu	Do. ...	Narsingpur ..	×	×	×	0	0	0	3	...	0 3 9	0 0 6	0 4 3	...	0 2 9
	9	Mukta kom Khandu	Do. ...	Jamb... ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	10	Sakhu kom Kondi	Do. ...	Do. ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	11	Savetra kom Rajaram	Do. ...	Selgaon ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	12	Jana kom Babaji	Do. ...	Jalgaon ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	13	Sai kom Genu	Do. ...	Do. ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	14	Sita kom Malbari	Do. ...	Do. .	×	×	×	0	0	0	3	...	0 3 9	0 0 6	0 4 3	...	0 2 9
	15	Changana kom Sakharam	Do. ...	Kagal ...	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
	16	Goja kom Genu	Do. ...	Kati	×	×	×	×	×	×	6	...	0 7 6	0 1 0	0 8 6	...	0 5 6
				Total ...	16	16	15	11	12	12	82	...	6 6 6	0 13 6	7 4 0	...	4 4 0

× Indicates a full day's work.
0 Do. absence from work.

PART I.—*Nominal Muster Roll* concluded.

Description.	No.	Name and Father's Name.	Caste.	Residence.	December 1900. 6th.	7th.	8th.	10th.	11th.	12th.	Total.	Daily Rate.	Amount.	Add for Sunday (rest-day) Payments.	Total.	Percentage.	Balance due.
												Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.	Rs. a. p.
		Children.															
Class III	1	Kundleka Bap Rajaram	Chambhar ...	Selgaon ...	×	×	×	×	×	×	6	0 0 9	0 4 6	0 0 6	0 5 0	·64	0 3 3
	2	Kondi Bap Babaji	Do. ...	Do. ...	×	×	×	×	×	×	6	...	0 4 6	0 0 6	0 5 0	...	0 3 3
	3	Sivaram Bap Daji	Dhangar ...	Kati	×	×	×	×	×	×	6	...	0 4 6	0 0 6	0 5 0	..	0 3 3
	4	Tani Bap Genu	Do. ...	Do.	×	×	×	×	×	×	6	...	0 4 6	0 0 6	0 5 0	...	0 3 3
	5	Radhi Bap Genu	Chambhar ...	Do. ...	×	×	×	×	×	×	6	...	0 4 6	0 0 6	0 5 0	...	0 3 3
	6	Malu Bap Bhiwa	Mali	Sidpur ...	.	...	...	×	×	0	2	...	0 1 6	0 0 3	0 1 9	...	0 1 0
	7	Chandra Bap Abaji	Chambhar ...	Do. ...	...	...	...	×	×	×	3	...	0 2 3	0 0 3	0 2 6	...	0 1 6
	8	Hawsi Bap Bhiwa	Mali	Kati	..	...	...	×	×	×	3	...	0 2 3	0 0 3	0 2 6	...	0 1 6
				Total ...	5	5	5	8	8	7	38	...	1 12 6	0 3 3	1 15 9	...	1 4 3
				Grand Total ...	...	...	...	...	...	..	...	...	12 9 6	1 7 9	14 1 3	...	9 0 6

× Indicates a full day's work.
0 Do. absence from work.

Total of this Roll ..	9 0 6
Deduct— Payments not made as per details transferred to Register of arrears, Part II	0 15 6
Balance paid ...	8 1 0
Add— Arrears of previous Muster Roll now paid off as per details in Registers of arrears, Part II	...
Total, Payments ..	8 1 0

(Signed) K. V. BENDRE,
Cashier.

Dated 15th December 1900.

(Signed) NARAYAN VISHNU,
Supervisor.

(„) SAYAD CHAND,
Sub-Overseer.

PART II.—*Register of Arrears of Wages due to Work-people.*

Serial number as per Nominal Muster Roll.	Name and Father's Name.	Number of Days.	Amount due.
			Rs. a. p.
3	Zinga Bhawani	3	0 2 9
5	Babai Sadhu	4	0 3 6
6	Ranu Mubadu	3	0 2 9
8	Paru Kesh	3	0 2 9
14	Sita Mathari	3	0 2 9
6	Malu Bhiva	2	0 1 0
			0 15 6

(Signed) K. V. BENDRE,
Cashier.

GANG No. 7.

PART III.—*Detail of Measurement of Work done by the labour employed as per this Nominal Muster Roll.*

Description of Work.	Cubical contents.	Superficial contents.	Deduct as shown last month.
Executive Engineer P. I. No. 6252, dated 11th August 1900.	C. ft.	Rate.	Amount.
Earthen Dam.		Rs. a. p.	Rs. a. p.
Excavating soft murum and spreading on dam and watering lead ... ... 750—850	709	0 12 9	5 10 6
250—350	117	0 6 6	0 7 6
450—550	520	0 9 0	2 14 9
	1,346		9 0 9
	Rs. a. p.		
Proportion of total amount of muster roll to cost of work done	9 0 9	0·64	
	14 1 3		

(Signed) NARAYAN VISHNU,
Supervisor.

Measurement Book No. 233, page 50.

/3.7

Rao Bahadur V. R. Kelkar.

Replies by Ráo Bahádur V. R. Kelkar, District Deputy Collector, Khándesh, C. D., to the questions drawn up by the Famine Commission, with regard to the C. D. Pránt consisting of the Tálukas of Dhulia, Amalner, and Erandol of the Khándesh District.

Introductory.

1. The outlook in my Division was good when the rains of 1899 commenced. The people had already prepared their lands for kharif and cotton. The rainfall in June was not below the average and so they sowed the kharif as usual, but the seedlings withered as there was almost no rainfall in the succeeding months.

The kharif and rabi outturn was sixteen annas, taking the average to be 12 annas, in the year 1897. It was comparatively bad, but not below the average in 1898.

2. The kharif sowing was near up to the normal. The figures for the years 1895-96 to 1898-99 show that the kharif area cropped was from 685,000 to 690,000 acres. The kharif area in 1899-1900 is 622,000 acres.

3. (*a*) The average rainfall of my Division during the rainy season is 26 inches 50 cents.

(*b*) The actual rainfall in the rainy season of 1899 was 7 inches 89 cents. The percentage is 29·77.

(*c*) The rains ceased totally from October.

(*d*) The distribution and the average of the rainfall was as under :—

Month.	Fall in the year.	Average.
	In. c.	In. c.
June	3 44	4 19
July	1 58	9 29
August...	1 79	5 10
September	1 4	7 10

5. The total population of my Division is 313,791 according to the census of 1891. Nearly 60 per cent. are petty cultivators and 12 per cent. labourers, who depend exclusively on agriculture.

Preliminary Action.

6. The necessity of relief was assumed mainly from the failure of crops, from many petty and serious thefts committed, from the fearful mortality

amongst agricultural cattle, and from the fact that the people appeared less able to bear the calamity, as it followed within three years of the famine of 1896-97. Three test works were opened in October 1899, one near near Morana to the west of the Dhulia Táluka, the second near Laling to the south of the Dhulia Táluka, and the third near Vanjari, nearly in the centre of the Division.

7. The test works were crowded, and the facts stated above led to the opening of the Relief Works.

8. Metal-breaking was the relief measure adopted. The relief workers were paid according to the results as per section 18 of the Famine Code. Still the people flocked to the work.

11. (*e*) Free grazing was allowed to the agricultural cattle in open forests, pasture land, and revenue padit in this Division from the second week of August 1899.

(*d*) A cheap grain shop was opened in Dhulia on the 29th August 1899. The Hindu merchants (Bhatyas, &c.) of Dhulia and Párola raised a subscription and distributed bread to poor indiscriminately from December 1899 for about 7 months. They collected Rs. 17,350 in Dhulia and Rs. 1,085 in Párola for the purpose.

(*a*) Test works were opened in September and October 1899.

(*c*) Kitchens were opened only on the works from November.

(*b*) There was only one poor-house at Dhulia. It was opened on the 24th April 1900.

Táluka or Mahál.	Number of Circles.
Dhulia	5
Amalner	5
Erandol	6
Párola (Mahál) ...	2

12. (*a*) The tálukas were divided into circles as per margin, and Circle Inspectors were appointed in December 1899, and Special Head Kárkúns in January 1900, for each táluka and petha to arrange for village relief.

(*b*) The distribution of Tagái to sink and deepen wells was commenced in October 1899 to stimulate the local employment of labour among other reasons.

(*c*) A meeting was held in Dhulia in March 1900 to collect subscription, and Táluka Committees were then appointed to organize local charity.

(*d*) In addition to the establishments stated in paragraph (*a*) above, the Mámlatdárs and the Divisional Officer in charge and the District Medical Officer, &c., were observing the general condition of the people.

13. Loans to the extent of Rs. 11,850 were issued under the Land Improvement Loans Act, XIX of 1883, in October 1899 for sinking and deepening wells under the usual conditions to cultivators. The amount will be recovered by instalments every year in a period specified in each case.

1899

14. Irrigation wells can generally be made in my Division. The average depth of water below the surface on the cessation of rains in 1899 was 32 feet. The digging of wells was encouraged by loans and they were generally successful—

(*a*) in securing the crop on the ground,

(*b*) as a permanent improvement,

(*c*) as a temporary measure to employ labour.

15. The works first undertaken were metal-breaking. They were not ordinary works, and were conducted under the supervision of the Public Works Department.

16. The tasks were exacted according to the old Code classification up to 27th October 1899 as under :—

Class.	Men.	Women.	Children.
	Cubic ft.	Cubic ft.	Cubic ft.
A	7½	5	1
B	5·62	3·75	
C	3·75	2·5	

After the 27th October 1899 the tasks were as under irrespective of sex and previous occupation—

Class.	Cubic feet.
I Class	6″
II „	3″
III „	1½″

The payment was in strict proportion to results. There was a maximum but not minimum. There was no rest-day allowance. Allowance was paid to non-working children only and not to adult dependants.

18. The overcrowding on the test work and the circumstances stated in answer to question 6 above lead to the conversion of test works into regular relief works.

Large Public Works.

19. Large public works.

23. Admission was free to all persons ready to submit to the labour test. There was no system of selection. No distance test was insisted on. Residence was made compulsory up to rains when the huts were raised.

24. The general distance was from 10 to 20 miles. There were cases in which people from a distance of 40 miles even had come to the works as there were none nearer to their villages.

26. There was generally one Special Civil Officer for each work. They were clerks in the Revenue Department, and their salaries ranged from Rs. 50 to Rs. 75. They were considered subordinates to the local representatives of the Public Works Department.

The Civil Officer had nothing to do with measurements, &c.

27. The Civil Officer classified the new-comers, but he had nothing to do with the prescribed task. He used to bring any hard case to the notice of the Public Works Department officer when he moved in the gangs, and the latter officer used to give due weight to his suggestions.

28. There were about 50 to 100 labourers in a gang. If the number was 50 the general constituents were 10 men, 25 women and 15 children. The attempt to secure village or family gangs was not generally successful. There were many caste gangs.

30. The Code classification has served the purpose well. Women, as a rule, were kept in the second class.

31. The system of payment by results was adopted at the time of the test work only. The two systems were never simultaneously adopted.

35. The workers were allowed daily a rest-day wage equal to one-sixth of the Code minimum when they earned more than, or equal to, the Code minimum. When they earned the penal minimum, one-sixth of that minimum was given.

36. The minimum wage is not high.

38. The payments were made weekly. A more frequent payment is desirable but not practicable.

39. The orders were to pay daily to new-comers. Where practicable, they were so paid if they asked for payment. Subsequent weekly payments even threw the workers into the clutches of the wretched local enterprizers who found it convenient to turn themselves into Banias with a capital of Rs. 20 even.

40. Payment was to the individual, which is a preferable system.

43. The maximum wage was as per section 109 of the Famine Code. The children below 8 and famished children between 8 and 12, and weakly persons not able to work were fed in the kitchen. Weakly persons able to do nominal work were given minimum wages irrespective of the task done by them. The arrangement is preferable, as it enabled them to regain health and then do the work of the higher class.

46. The scale was fixed on the rate, given generally by the Mámlatdár with regard to jowári or bájri (and from April rice), whichever was cheaper. The rate was taken to the nearest pound.

Special Relief.

59. There are no aboriginal tribes in this Division.

65, 66. Free grazing was allowed to agricultural cattle in open forests, pasture land and revenue padit in this Division from the second week of August 1899.

A grass depôt was opened at Amalner in the month of May for about a fortnight. Compressed grass was supplied to the depôt from Nardana, &c.

Gratuitous Relief.

67. There were no small village works. Dependants were relieved on large public works with cooked food.

68. Cooked food on large relief works and uncooked grain in villages. The system of cooked food was not economical and practicable in villages.

70. There was only one poor-house at Dhulia in this Division. It was opened on the 24th April 1900. The Kunbis, Bhils and Mahárs most frequented them. The number on the first day was 1,403. It rose to 2,766 on the 31st May 1900, and then it commenced to fall. Out of the 2,766 people, 824 were Kunbis, 948 Bhils, 439 Mahárs, 89 Kolis, 88 Vanjáris, 72 Chambhars, 59 Mángs, and 247 others.

71. Vagrants and immigrants of all ages, too weak to work, were only admitted. Persons who refused to work on relief works were never sent to this house.

72. The inmates were examined every Monday, and those who were found fit to do work were sent to the nearest relief work.

73. No kitchens were opened after the rains broke. The kitchens opened before the rains were—

Name of Táluka.	Name of Kitchen.
Dhulia	Purmepada. Mukti.
Amalner ...	Amalner. Vanjári or Rájvád. Dhaba. Kurha. Mangrul. Machibardi. Deoli. Mhaswe.
Erandol ...	Eklagna. Chinchpura. Palshi or Dharamgaon. Erandol. Toli. Umarde. Sarve. Savkhede.

Each kitchen was expected to serve one work, which sometimes extended to four miles.

74. Cooked food (jowári flour and dál) was distributed as per provisions of section 105 (*c*) of the Famine Code, regularly twice a day, between 9 and 10 A.M. in the morning and between 5 and 6 P.M. in the evening. The people were compelled to feed on the premises.

75, 76. There were no civil kitchens except those on the works themselves.

77. The poor-house ration was as per provisions of section 105 (*c*) of the Famine Code, and consisted mainly of jowári flour, dál, &c. Sick persons and children below four years were given special ration consisting of rice, milk, coarse sugar, &c., as per advice of the Civil Surgeon.

78. The village gratuitous relief lists were first prepared by the officiating Patels and Kulkarnis. They were then checked by the Circle Inspectors, &c. The Circle Inspectors used to inspect the recipients once a week. The special Head Kárkúns used to inspect recipients of one Circle at least once a week. The Táluka and Divisional Officers used to inspect recipients when they visited the villages.

79. The payments were made weekly in grain at a convenient central village in the Circle. The inferior village servants (section 60 of the Famine Code) were paid in cash monthly in the Táluka Kacheris.

80. None.

81. Generally the cooks were of the Kunbi caste. Some reluctance was shown by goldsmiths, &c., at the commencement.

82. The Special Civil Officer (and Superintendent where there was no Special Civil Officer) was in charge of the kitchens. The Mámlatdárs and the Divisional Officers and the Public Works Department Officers in charge of the work used to supervise the kitchens.

83. Attempt was made to open cheap grain shops at Párola and Amalner by some Gujaráti merchants, but they were open for few days, and admitted any people, and so were scarcely of any use to the real poor. The people of the town of Dhulia raised a subscription of Rs. 4,302 for a cheap grain shop under the guidance of Mr. Bonus, the Collector, and a shop was opened on the 29th August 1899. It admitted poor people of all classes. Jowári or bájri worth annas eight only was sold to each individual at a time in presence of the Punch. The rate was one seer cheaper per rupee. The total amount of the grain bought was Rs. 45,221 and the amount realised was Rs. 42,328. The shop was closed on 1st June 1900.

84. No.

General.

92. The people in receipt of relief were mainly Kunbis, Bhils, Mahárs, Mángs, Vanjáris, Mahome-

dans, Beldárs, &c. Most of the Kunbis were ryots and occupancy tenants. Some Kunbis, Vanjáris, Mahomedans and Bhils were agricultural labourers. Most of the Mahárs, Bhils and all Beldárs were ordinary labourers accustomed to the kind of work they were doing. There were also village Balutdárs, such as carpenters, potters, sonars, washermen, barbers, &c.

94. No Sávkárs would advance a farthing to their usual ordinary debtors even. If the relief work was within five miles of their villages people did not wait to exhaust what they had, but ran to the work at once.

95. The tests of the Code are sufficient to prevent persons not in need of relief from seeking it.

97. The Camp Kárkún of the Public Works Department used to collect this information and take it to the Special Civil Officer every morning. Village officers copied the entries of the Special Civil Officers into the Village Form No. XIV.

99. Special measures were taken to keep the water-supply clean and sufficient on all works in my Division.

Permanganate of Potash was used once in Amalner and Erandol and every fortnight at Purmepada.

An impure and insufficient water-supply was never a cause of increased mortality.

100. (*a* & *c*) Sweepers were appointed for the camp, the kitchen, and the place where the workers worked. Trenches were dug at a sufficient distance from the Camp and kitchen and filled up generally every day. A guard was kept near the water-supply and the people were not allowed to dip their fingers or pots into the large casks and barrels filled up with water for distribution by specially appointed men and women.

The Special Civil Officer used to supervise these arrangements. From about April the Special Civil Officers got the help of Native Military Officers and then the arrangements were perfectly sufficient.

(*b*) The poor-house in Dhulia was located in a good fenced private compound with a good closed well. Sweepers were appointed to keep the premises clean. An open ground close by was obtained at a rent of Rs. 20 for the whole period. Trenches were dug in the ground and filled in every day. The Superintendent and the Civil Surgeon used to supervise the arrangement.

101. The Special Civil Officer used to inspect the grain shops at least three times in a week, and they did find and prevent the sale of unwholesome grain.

102. Yes. The people used to collect Fang (फांग) leaves (a wild creeper having very small leaves like those of आपटा "Apta") and mix it with the jowári flour. Sometimes they used to boil the leaves by themselves and eat them. This food did affect their health and they used to purge.

103 and 104. There were scarcely any people from the Native States on works in this Division.

104. (*a*) Some of the orphans were made over to their relations and friends at the end of the famine. The remaining orphans, about 75, are in charge of the Rev. Mr. Macartney of Málegaon.

108. None. A regular enquiry was made on this point on the complaint of Messrs. Bird and Company as per Government Resolution No. 1862, dated 30th March 1900, Financial Department.

109. No change.

110. The practice of paying wages in grain does now not prevail in this district. The exception is with regard to groundnut. One-fourth to one-eighth of the quantity dug up is the wage.

Cash wages have risen in sympathy with the prices. The daily wages of an ordinary labourer were one anna to one anna six pies up to four years ago. They have nearly doubled.

112. Staff Corps officers were employed on some works and officers of the Native Army were employed on most of the works from April 1900.

V. R. KELKAR,
District Deputy Collector,
Khándesh, C. D.

Dhulia, 11th January 1901.

/37—

R. B. Maneklal Narbheram Munshi.

Answers by Ráo Bahádur Maneklal N. Munshi, Huzúr Deputy Collector, ~~Baroda~~, to questions drawn up by the Famine Commission.

Introductory.

From the 26th of July 1899 to 15th July 1900 I was in charge of the tálukas of —

(1) Vágra,

(2) Anklesvar and

(3) Peta Hánsot.

1. The outlook in the Vágra Táluka was gloomy The fields were cultivated and kept ready. The rain was as shown in the margin. It was not sufficient for kharif crop. In Anklesvar Táluka and Hánsot Peta, the outlook was not better than Vágra. The character of the harvests in the two preceding years of 1899 is not known to me personally as I was not in the district, but from what I have been able togather from the public, it was not 8 annas in Vágra, while in Anklesvar and Peta Hánsot there was from 8 to 10 annas.

	In.	cts.
Vágra ...	5	19
Anklesvar ...	12	28
Hánsot ...	9	87

2. The kharif sowing was not normal. The cultivated area was as below :—

	Percentage of total cultivated area to the total culturable normal area.
Vágra	1·08
Anklesvar ... ... } Hánsot ... ... }	16·07

The normal area was arrived at on the average of last three years cultivated land.

3. The average rainfall of the past five years of the several tálukas of this charge was as below :—

	Average rainfall. In.	Cts.
Vágra	41	10
Anklesvar	50	9
Hánsot	31	69

The rainfall of the year 1899 was—

	In.	Cts.
Vágra	5	19
Anklesvar	12	28
Hánsot	9	87

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and the percentage of the same of the average rainfall was—

Vágra	12·62
Anklesvar	24·51
Hánsot	31·03

The rain ceased in the month of June 1899 in Vágra, Anklesvar and the Hánsot Máhal. The rainfall from June to September was as below :—

	Vágra.		Anklesvar.		Hánsot.	
	Total.	Average.	Total.	Average.	Total.	Average.
	In. Cts.		In. Cts		In. Cts.	
June .. .	4 47		10 31		9 2	
July	0 21		0 93		0 49	
August	..	41 10	0 83	50 9	0 21	31 69
September	0 48		0 21		0 15	
October	0 3		..		..	

4. The percentage of actual kharif harvest of 1899 represents as below on the normal harvest on the normal cultivated area :—

	Vágra.	Anklesvar.	Hánsot.
	A. g.	A. g.	
Normal harvest ...	111,925 16	114,379 26	
Actual harvest ...	1,212 14	18,388 8	
Percentage of actual to normal	1·08	16·07	

5. The total population of the several tálukas in this charge and the estimated percentage of the petty cultivators and labourers are given below :—

	Vágra.	Anklesvar.	Hánsot.
Population ...	36,939	44,284	26,419
Petty cultivators ...	9,000	11,000	6,500
Labourers ...	10,000	12,000	7,000

Preliminary Actions.

6. The necessity of relief was assumed from the fact of the failure of crops.

7. There being no employment of labour on the field works owing to the insufficient fall of rain, the labourers could not maintain themselves, and in the beginning of August 1899 a report was also received that there was necessity to open test works in order to see if there was any necessity to set in motion the machinery of regular relief work.

8. The following test works were opened in the first instance.

Name of work.	Sanctioned Amount.	Date of commencement.
Vágra.	Rs.	
Deepening Keswan Tank ...	500	6th September 1899.
Do. Vahial do. ...	500	21st September 1899.
Do. Kadodra do. ...	500	13th September 1899.
Do. Jolwa do. ...	500	5th October 1899.
Repairing Broach-Dehej Road	3,058	4th August 1899.
Anklesvar.		
Deepening Ravidra Tank ...	500	22nd September 1899.
Do. Kanwa do. ...	500	25th September 1899.
Hánsot.		
Deepening Dungra Tank ...	500	4th September 1899.
Do. Panjroli do. ...	500	23rd September 1899.
Do. Samli do. ...	500	6th October 1899.
Do. Sheikh Nizam Tank	100	28th September 1899.
Repairing the bank of Alva Tank	500	14th September 1899.

In order to gauge the extent of the distress, the Code wages were introduced; while the ordinary daily rate of wages reigned from 3 annas to 4 annas in the normal year. As the lower rate of wages attracted a large number of labourers, it was quite apparent that there was distress and regular relief works a necessity.

9 (*a*). The lists of relief works were ready and a printed one was received from the Collector's office.

(*b*). The scale of establishment was not in my office nor was list of candidates who can be employed on the famine work.

10. The relief programme consisted of large. works as the backbone of the system.

11. The sequence of relief measure was—

1. Test work.
2. Kitchens.
   (*a*) On works.
3. Poor-houses.
   (*a*) Kitchens in villages.
4. In the beginning of the scarcity there were movements for private charity.
5. There are no forests in the division.

12. In the beginning of famine, when it appeared necessary that village dole was required to be given,

a Village Panch of respectable and honest persons was appointed for inspection and control of gratuitous relief under Section 56 of the Famine Code. The Mámlatdár used to control it, who had under him Circle Inspectors. This establishment was supervised by the Divisional Officers and the Collector.

(*a*) There was no special agency to stimulate the local employment of labourers.

(*b*) In the beginning when there was no rain and the prices of food grain had risen, movements were made by local bodies to start charities.

(*c*) The general condition of the people was supervised by village officials, Circle Inspectors, Mámlatdárs, Sub-Divisional Officer and the Collector.

13. The loans were given at the outset and statements marked A, showing the extent and the Acts under which they were given, are appended herewith. The Tagávi was given to petty cultivators principally in the commencement for the growing of fodder by digging kutcha wells and for moats and ropes. It was also given for fodder as well as for bullocks and seeds. They were recoverable in parts.

14. In the tálukas under my division there are two kinds of villages, those on the sea coast and on creeks and others removed from them. Those removed from the sea coast and where sweet water can be found, wells can be made, but not on the coast line or near creeks. The average depth below the surface of water was only one-fourth. Loans were given for making new wells, but

(*a*) They were not useful in securing crop in the year.

(*b*) Of course they will be of use in future years and they are a source of permanent improvement.

(*c*) I saw many of these wells in the course of being built, but they gave labour to brick-makers and brick-layers and no agricultural labourers got employment except the well-to-do holders, who got tagávi and employed themselves and members of their family.

15. The labour being the first criterion for relief works, they were taken up by the District Local Board, and they have been mentioned in paragraph 8, and they were conducted under the supervision of village officers and Local Fund Overseers under the control of Mámlatdárs.

16. Previous occupation was taken into consideration for those not habituated to labour as well as task-work was taken.

17. The payment was in strict proportion to the results. A maximum wage used to be given without a rest-day allowance or an allowance to dependants.

18. The test works opened induced so many agricultural and other labourers that regular relief works had to be opened first in the Vágra Táluka, then in Peta Hánsot, and lastly in Anklesvar Táluka.

Large Public Works.

19. Large relief works were opened.

20. The works were under the control of the Executive Engineer of the district. No information as to supervising establishment is in my office. No delay occurred in opening the works or in supplying tools and plant.

21. The works were divided into charges for 5,000 workers, and when there were more, they were drafted to other charges.

22. Each charge had its own establishment under the control and supervision of the charge officer of the Public Works Department, and no detail of establishment is available as I am not in charge of the division now. All works had huttings for labourers as laid down in Appendix IV of the Famine Code. Also there were sheds for sheltering other people. Every work had conservancy and sanitation arrangements, such as privies for males and females with sufficient number of bhangis to clean them. As regards water-supply, utmost care was used to be taken in cleaning out all the sweet water wells in the neighbourhood of such works. Also water tanks and casks were placed in different localities on the works and sufficient number of water-drinking places were reserved. Every such work had its own bázár supplied by the Revenue authorities. Every work had its hospital with dispensing room, with wards for males and females. Such hospitals were under the supervision of Hospital Assistant, and were controlled by the District Medical Officer and supervised by the Public Works and Revenue authorities.

23. The admission to such works was free. Distance test and compulsory residence on the works was exacted subsequently.

24. In the táluka of Vágra, which is about 30 miles in length and 15 in breadth, with a population of 37,000 souls, two works of the magnitude mentioned were sufficient. Local applicants used to go 10 to 15 miles, but many outsiders were found who had come double the distance.

25. The officers of the Public Works Department were subordinate to Civil Officers. They were not so only in professional matters.

26. Each charge had a separate Civil Officer. He was either taken from the clerical class or graduates or from other Government Departments, such as Custom Preventive Service, Salt and Postal Departments. They received a monthly salary from Rs. 40 to Rs. 100. Their position was rather inferior to the local representatives of the Public Works Department. The Civil Officer had full

authority to take measurements and to see that they were correctly and punctually made. In other respects he carried on the duties mentioned in paragraph 426 of the Report of the Famine Commission of 1898.

27. No such case happened to my knowledge.

28. Gang of labourers were formed with numbers varying from 12 to 60 in each gang. Arrangement was made to secure village or family gangs as far as possible, and it worked successfully, but the appointment of a mukádam and mustering kárkún out of the same gang worked rather harshly towards the workers as these employees (Mukádams and Kárkúns) sought to give the lightest work to their family members and relations.

29. The classification of labourers was made according to Section 70 of the Famine Code based on paragraph 445 of the Report of Famine Commission of 1898, and the scale of wages was that laid down in Appendix V of the Famine Code.

31. Payments by results was first adopted, but subsequently task-system was introduced. They were not introduced simultaneously on one work.

32. I agree with the Famine Commission of 1898 that the system of payment-by-results is unsuited in the time of acute distress, and even if it be introduced from the commencement of famine, it cannot suit.

33. The full task was exacted at the outset. It was graduated to the class of workers. The full task was raised subsequently by 25 per cent.

34. The scale of wages adopted was inadequate. The workers could not fairly maintain themselves upon the wages, and it is not believed that any saving was made upon their earnings, as the wages in copper coins returned to Banias on the works, leaving hardly any amount with the workers themselves.

35. The rest-day wages were given, and apparently they were given because the full wage was not sufficient to maintain the workers on the rest-day, and because he could not earn more than the full wage during other days. The system of rest-day wages is preferable.

36. The minimum wage is not too high and that any fine up to penal wage or between penal and minimum is too low to keep up a labourer.

37. Minimum wage was not allowed, but there was tendency to fine workers up to penal wage, although the penal wage did not become the wages generally earned; yet in many cases it was given, and it might be attributed to high task, and its effect was the further deterioration of health.

38. For the first three days payment was made on every day and then twice a day up to next week. Thereafter it was made weekly. At least bi-weekly payments will be an improvement.

39. New-comers were paid as above. The concluding question may be answered in the affirmative.

40. Payments were made to individuals and not to the head of the gang. The system of payments to individuals is preferable.

41. As all the muster rolls are kept by the Public Works Department, no information is available on the records of this office.

42. Yes.

43. The maximum wage was money equivalent of 19 chataks as laid down in the Code. Kitchens on the works were opened for the relief of children, dependants and incapable, but those who were capable of some work were employed on light work, such as the consolidation of embankment. The arrangement for relieving these persons was to pay them minimum wage.

44. No contractors were ever employed.

45. Muster rolls were kept.

46. The Mámlatdár used to furnish the price scale and wages were calculated thereupon by the Public Works Department. It was based upon the staple food-grain of jowári. Difference of fractions of a pound was generally neglected.

47. When any large work was found a necessity, one of those sanctioned was chosen by the Executive Engineer in consultation with the Collector. No sooner was the sanction obtained, than an advance party proceeded to the work and used to put up huts, latrines, quarters for establishment, kitchen, hospital, and commenced the cleaning of wells. The Special Civil Officer and Medical Officers were appointed.

Admitting workers, providing for dependants and conserving and supplying of water rested with the Civil Officer, while classifying labourers, providing for tools and plants, marking out and measuring of work, paying of wages and imposing of fines rested with the Public Works Department. The hospital requirements were arranged by the District Medical Officer and Special Civil Officer.

48. The matter refers to higher authorities.

49. No workers were drafted from large relief works to small village works.

Small Village Works.

50. The small relief works were of great use in giving relief to those agriculturists who had no means to live upon and had left for the large works, but had to return to their villages for agricultural pursuits when the rainy season drew near.

51. The small village works included all tank works in this division.

52. They were conducted under the supervision of the Civil Agency by direct management.

53 and 54. No reply is necessary.

55. No attempt was made to work the Code Task System. The scale of wages was laid down by Government at 1½ anna for males, 1 anna for females and 9 pies for children. Employment was given to village agriculturists.

56. No system of selection of applicants was tried.

57. No small village works were opened within 5 miles of large public works and no labourers were willing to go to small works, as the wages were lower on it, except those whose agricultural pursuits or household duties compel them to leave large works.

58. The people of Gujarát and particularly those of this division were found to be very reluctant to leave their homes, their hearths, and their cattle to join large works to such a distance as to unable them to return to their houses, and particularly such works are desirable for these people.

Special Relief.

59. There were no aboriginal tribes in the division.

60. There were no forest or fodder works in this division.

61. As far as I am aware no able body labourers were engaged on works of private utility at public expense.

62. No special measures were taken to relieve artisans and other craftsmen as there appeared no need for it.

63. They were reluctant to go on ordinary relief works as they got work in their own crafts.

64. Under the circumstances mentioned in paragraphs 62 and 63 no reply is necessary.

65. There was a great dearth of fodder in the beginning of the famine in the Vágra Táluka and in the latter part only in Anklesvar and Hánsot. A scheme to export cattle was introduced for pasture in other districts. Again measures were adopted to establish a cattle camp in the head-quarter of the district, where agriculturists' bullocks used to be fed on Government grass; also to prevent mortality of cattle; not only Government grass but grass purchased by the Local Board and that from the Charitable Fund was imported into this district and the efforts made to bring in grass and to sell it to poor cultivators had done something to protect the lives of cattle.

66. Principal depôts for grass were opened in Broach and Anklesvar and grass was imported from Thána Forests and the Central Provinces.

Gratuitous Relief.

67. Dependants on large public works were relieved by cooked food in kitchens established on all the works, but on small village works no such

relief was given as there was a system of village doles in force.

68. Gratuitous relief was given through kitchens, poor-houses, and village doles, and the last one was chosen because it saved the trouble of going and coming to kitchens and poor-houses as well as it gave more satisfaction to old and infirm.

69. The distribution of village relief did not go beyond the classes mentioned in paragraph 141 of the Report of the Famine Commission of 1880 and tests were those as mentioned in Section 57 of the Bombay Famine Relief Code.

70. One poor-house at Vágra, one in Anklesvar and one in Hánsot Peta was opened on the marginally noted dates. Poor classes of people, who could not join the work, wayfarers and others joined them. In none of these poor-houses the recipients of the relief ever exceeded 400 souls on a day during my time.

Vágra, 4th December 1899.
Anklesvar, 1st December 1899.
Hánsot, 3rd April 1900.

71. Poor-houses were also used for vagrants and emigrants, and persons wilfully not working on relief works were sent there.

72. Periodical inspections by the Collector, Divisional Officer and Medical Officers were made to clear the poor-houses by sending people to their homes or the relief works.

73. As I have got no charge of the division any longer, the record is not with me.

74. The rations provided in poor-houses were as laid down in Section 105 (*c*) of the Famine Code. Two meals were given at the time laid down in Appendix VI of the Famine Code at a fixed time with slight variations. Food was not allowed to be taken away from the poor-houses.

75. No civil kitchens were opened close to relief works.

76. The admission to kitchens was not restricted.

77. The poor-house ration was as laid down in Section 105 (*c*) of the Famine Code and in morning rice and dál and in the evening vegetable and bread used to be given. Sick persons were given rations under Section 106, and it was varied as recommended by the Medical Officer in charge of the poor-houses.

78. The village gratuitous relief lists were drawn up in the first instance by the village officers and the panch appointed under Section 56 of the Famine Code. These lists used to be checked by Circle Inspectors, Mámlatdárs and Divisional Officer, who often used to inspect the recipients.

79. The payment of village gratuitous relief was made in grain daily. Such recipients used to come at the shop of the grain dealer, where also the village officers and panch used to be present.

80. Except those mentioned in the Code, gratuitous village relief used to be given to school-going children of those persons who had joined large relief works, or of those who under the necessity of service or other reason had to stop in the village (such as village servants).

81. As far as practicable higher class of cooks were employed, such as Brahmins and Rájputs. I am not aware of any instance in which any reluctance was shown to take cooked food by any class or at any stage except in the kitchen on the tank at Parwat in Peta Hánsot, where an Englishman was employed as Special Civil Officer. But on being advised not to touch any cooked food, no further complaint was received. All these were Hindus.

82. The kitchens were placed under Superintendents and the Special Civil Officers supervised them. Also the Revenue superior authorities had supervision over them.

83. No cheap grain shops were opened by Government agency.

84. No reply is necessary as there were no cheap grain shops.

Suspensions and Remissions of Land Revenue.

85. During my tenure of office, no orders of suspension or remissions were received although proposals were submitted. The record being not just now available with me, no answer can be given.

86. The statements of suspensions were based both on the failure of crops as well as on the general capacity of the individual to pay the revenue. The capacity was determined by the Mámlatdárs or the Mahálkari of the táluka.

87. Suspensions were determined after the time of revenue collections.

88. No such instance has come to my knowledge.

89. As long as I was in charge, no suspension or remission was determined and no complaints were received of any facts tending to show that relief was not given by suspension.

General.

90. No doubt that the relief was sought by more than 15 per cent., nay, it once reached to 30 per cent., but it is a question whether all the relief seekers were *boná fide* residents of the division, and the reason for such an increment lies in the fact that many persons had joined the relief works from other districts or from neighbouring Native States where no relief works were opened or started in time.

91. Neither the relief was excessive nor defective.

92. People on the relief works belonged to the class of proprietors, ryots, occupants, tenants and other agricultural labourers, but their numbers are not available with me.

93. This being the first famine of its kind in Gujarát, nothing can be said on the subject.

94. Some instances have come to my notice showing the contraction of private credit and the people never went to seek State relief before their own means were exhausted.

95. Yes, the tests are sufficient.

96. No reply is needed.

97. Generally in the villages the work of registering births and deaths is performed by the village officers.

98. Where high mortality prevailed, it cannot be due to diseases wholly attributable to unsuitable and insufficient food, except local inquests are held in individual case to find it out, but that is impracticable.

99. Impure and insufficient water-supply is also one of the causes of increased mortality, but it cannot definitely be said what percentage of deaths was solely due to impure or insufficient water-supply. In almost all places where works were opened, arrangements were made by the Public Works Department to improve and extend the water-supply by cleaning out old drinking wells in the neighbourhood of the work and by digging kucha wells on the site of the work itself. Permanganate of potash was used to disinfect wells and other water-supplies and it was used at least once in a week.

100. On large works latrines and urinals were erected according to the Code, and services of bhangis were retained to clean them. Also the camps were kept clean by these men. Burial-grounds at a distance were set apart. Every effort was made to secure good potable water. The same arrangements were made for the poor-houses and kitchens. They were supervised by the Medical Officer in charge of the work as well as by the District Medical Officer and other District officers.

101. Grain shops used to be examined from time to time by Special, Civil, Divisional and other officers, and in some cases inferior and unwholesome grain was found and criminal prosecutions had to be resorted to.

102. People in this charge were never seen to supplement their food with wild products.

103. There was no doubt immigration from Native States, and in order to test the same I had personally examined musters on the Parwat, Sisodra, and Anklesvar tank works, and roughly the persons of Native States receiving relief were not less than 15 per cent.

104. The data of mortality is not available with me as I am no longer in charge of the records of the division.

104A. Not being in charge of the division till the end of the famine, I am not in a position to state how the orphans were disposed of.

105. I have to offer no suggestions.

106. Yes, about the Tápti Valley Railway in supplying waggons for fodder.

107. No information regarding food traffic was received by the Divisional Officers.

108. No.

109. There has been no change of crops in the recent years.

110. The practice of paying wages to labourers in grain does not prevail in this division, but in cases of private servants employed in household or agricultural purposes, grain wages are given. The tendency is increasing for cash wages and they have been rising in proportion to the rise in prices.

112. Staff Corps Officers were employed in supervision and native military men in minor posts.

113. No non-official agency was employed in this division except panch and non-official members of the Local Boards; but I doubt of their success.

115. The massing of people disorganizes family life, social restraint and moralities, and in order to remove this abuse, I venture very humbly to say that unless the massing of people on large works is reduced from 5 to 10 thousand to not more than 2 thousand, with highly paid Government officer of some standing with full control over the Public Works Department and Civil Agency instead of dual authority as is now exercised by these departments, there is little likelihood of any change for the better.

MANEKLAL N.,
Huzúr Deputy Collector.

A.

Statement showing the amount of Tagávi given under the Agriculturist Loans Act (XII of 1884).

Name of Month.	Vágra.	Anklesvar.	Hánsot.	Total.
1899.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
June	9,500 0 0	4,917 0 0	2,760 0 0	17,177 0 0
July	.....	83 0 0	.....	83 0 0
August	600 0 0	440 0 0	200 0 0	1,240 0 0
September	7,740 0 0	477 0 0	961 0 0	9,178 0 0
October	18,505 0 0	4,220 0 0	90 0 0	22,815 0 0
November	4,989 0 0	4,363 0 0	4,224 0 0	13,576 0 0
December	15,446 0 0	.....	555 0 0	16,001 0 0
1900.				
January	95 0 0	.....	335 8 0	430 8 0
February	595 0 0	100 0 0	40 0 0	735 0 0
March	19,595 0 0	33,937 0 0	15,574 8 0	69,106 8 0
April	1,948 0 0	1,780 0 0	2,061 8 0	5,789 8 0
May	16,700 0 0	1,458 0 0	5,313 8 0	23,471 8 0
June	22,873 0 0	30,639 0 0	32,749 0 0	86,261 0 0
July	64,133 13 0	17,508 0 0	4,413 0 0	86,054 13 0
August	53,014 0 0	32,198 0 0	22,873 0 0	1,08,085 0 0
September	33,052 0 0	11,337 0 0	25,947 0 0	70,336 0 0
October	54,662 15 3	4,020 0 0	3,536 0 0	62,218 15 3
November	26,270 4 7	8,633 0 0	6,956 0 0	41,859 4 7
Total ...	3,49,719 0 10	1,56,110 0 0	1,28,589 0 0	6,34,418 0 10

MANEKLAL N.,
Huzúr Deputy Collector.

A.

Statement showing the amount of Tagávi given under the Land Improvement Act (XIX of 1883).

Name of Month.	Vágra.	Anklesvar.	Hánsot.	Total.
1899.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
June	.....	.....	.....	.....
July	.....	.....	.....	.....
August	.....	.....	.....	.....
September	.....	.....	.....	.....
October	2,900 0 0	.....	.....	2,900 0 0
November	2,775 0 0	.....	.....	2,775 0 0
December	200 0 0	.....	.....	200 0 0
1900.				
January...	2,300 0 0	.....	200 0 0	2,500 0 0
February	2,750 0 0	.....	.....	2,750 0 0
March	7,100 0 0	.....	1,295 0 0	8,395 0 0
April	.....	500 0 0	.....	500 0 0
May	.....	.....	.....	.....
June	300 0 0	.....	1,000 0 0	1,300 0 0
July	.....	.....	415 0 0	415 0 0
August	.....	.....	.....	.....
September	.....	.....	.....	.....
October	.....	.....	.....	.....
November	.....	.....	.....	.....
Total ...	18,325 0 0	500 0 0	2,910 0 0	21,735 0 0

MANEKLAL N.,
Huzúr Deputy Collector.

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Ra'o Baha'dur B. R. Heblikar.

Answers by Ráo Bahádur B. R. Heblikar, District Deputy Collector, Sátára, to questions drawn up by the Famine Commission.

1. When the rains of 1899 commenced the outlook in the district was fair. The harvests in the preceding two years were about the average. There was famine in 1896 and as the harvests of the two following years were not plentiful, the people had not recovered from the effects of the distress before the commencement of the last famine.

2. The kharif sowings were much below the normal.

3. The average rainfall of the district (charge) is 25 inches and 80 cents, and the actual fall of 1899 was 13 inches and 40 cents, which represented 51 per cent. of the average. There were untimely early rains in that year and the rains that commenced in September ceased in the month of October 1899.

Preliminary Action.

6. Both.

7. The gradual rise in prices of food-grains, the abnormal deficiency in rainfall, the failure of crops, emigration, increase in the number of street beggars, increasing death-rate among cattle, great increase in the number of cattle brought to market for sale and the low prices at which they were sold, the clamour for relief in every village visited personally and the daily increase in the number of relief workers on test works.

8. The relief measures were improvements of roads. The tests were reasonable distance and payment by results.

11. At first Government forests were opened. Test works were then commenced at convenient centres at places which afforded convenience of drinking water, and kitchens were opened only at works, and poor-houses were opened when the works began to be closed. There was organisation of private charity only in three places, which was confined to the poor local residents.

12. After the relief works were regularly set on foot, Famine Awal Kárkuns were appointed, one for each táluka who had to supervise the work of Circle Inspectors. The Circle Inspectors as well as the Famine Awal Kárkuns had to submit their weekly diaries through the Mámlatdárs to the Sub-Divisional Officers. The diaries of Famine Awal Kárkuns were submitted to the Collector after scrutiny and remarks in each office. The remarks were then communicated to the officers concerned for action

being taken. The work done by this establishment was supervised both by the Mámlatdár and the Sub-Divisional Officer.

13. Yes. The loans were first issued for seed and cattle for rabi sowings and then for sinking wells to preserve standing crops. These loans were advanced liberally to cultivators only under the Land Improvement and Agriculturists' Loans Acts. The loans for seed and cattle were recoverable in the same year and those for land improvement were recoverable by instalments extending to not less than ten years.

14. Yes. In three tálukas out of four in my charge. The average depth was 30 feet. The digging of wells was encouraged as much as possible and it was highly successful in general in gaining the objects (*a*), (*b*) and (*c*).

15. These were road works and repairs to tanks. The works were under the supervision of the Public Works Department. Hardly any of these were under District or Táluka Local Boards.

16. The Code tasks; but I believe there were changes, and the tasks were exacted irrespective of sex and previous occupation.

17. This was so. There was maximum wage; but no minimum wage nor rest day allowance nor allowance to dependants.

18. The great and rapid increase in the number of workers on test works.

Large Public Works.

19. Large public works.

20. Public Works Department. The establishment was recruited as necessity arose. There was no delay in opening the works.

25. Except kitchen matters and classification of labourers, the Public Works Officers were practically independent of the Civil Authorities in all matters; however Civil Authorities used to investigate into complaints for short payments and to supervise at their convenience the payments to labourers. In fact they complied with the Code system as far as possible.

26. Yes. The the Special Civil Officer was selected from the Revenue establishment, generally qualified by passing the Lower Standard Departmental Examination and his salary was Rs. 50 per mensem. The Special Civil Officer performed the duty of classifying labourers, managed the kitchen affairs and had to attend to complaints on all matters and report them to the Sub-Divisional Officer and the Collector.

(*a*) Yes, but they could not find time to ascertain the correctness of the calculation of wages and attend payments at all times.

27. No.

30. I do not think that any further distinction is necessary than is now made, the present system being simple.

31. The system was one of payment by results generally.

32. I think that if works will be started in proper time system of payment by results with necessary reductions in tasks would do under proper arrangements and checks for measurements and payment of wages.

34. Looking to the condition of the workers throughout I should say that the scale was adequate in the circumstances of the last famine. Their condition did not deteriorate. I cannot say they could save upon their earnings.

35. Rest day wage was given. I do not think that the workers could earn more than the full wage. I think payment by results under conditions set down in answer to paragraph 32 with rest day wages would be preferable.

36. I do not think that the minimum wage was too high.

38. Payment was made once a week. I do not think more frequent payment would be desirable and practicable.

39. When the people came to relief works they were paid bi-weekly. At first payment otherwise than in this way threw the workers into debt of the Bania.

40. Payment was made to the individual and I prefer this method.

43. The maximum wage was 2 annas and 6 pies for ordinary labourers. The children below 8 years were fed in the kitchen and those above 8 years and below twelve were classed in the 3rd Class. The weakly persons capable of some work were put to nominal work (in the 4th Class).

44. None.

45. The muster-rolls were kept up. The establishment consisted of Mukádams, Maistris, Kárkuns, Sub-Overseers, Overseers, Supervisors and Supervising Officers, and this establishment was in my opinion sufficient for introducing Code system on emergency. The measuring and checking establishment was insufficient.

46. I believe by the orders of the Collector. The grain was bájri and jowári. I think small variations were not taken into account.

51. There were no small works in progress any where in my charge. Arrangements were made for drafting people from one large work to another as necessity arose.

Small Village Works.

There were none.

59. I think that it is quite possible to open [illegible] relief works towards the end of autumn ;

when it is highly desirable that the workers should be near their homes to attend to their agricultural interests so that they may not suffer by delays, &c.

Special Relief.

63. Attempt was made but without success for want of men to manage the system.

64. The weavers and other artizans carrying on business of sedentary nature showed aversion for ordinary relief works. These are also physically unfit for ordinary labour.

66. First of all attempt was made to induce the owners of cattle to take their cattle to the hills of the western tálukas where grass was abundant. Experience showed that the climate and the fodder did not agree with the cattle of the Desh and so the attempt was not completely successful. Then tagái was given to purchase fodder. The local forests were thrown open, but there was hardly any grass to feed upon. The rabi sowings, which were made with the assistance of tagái, produced some fodder without corn which was supplemented by kadbi imported from other parts from money earned by cart-hire. About $\frac{3}{4}$ of the agricultural cattle have been saved and about $\frac{1}{3}$rd of the milch cattle.

67. No. The Desh people have great prejudice against grass from the hill tracts and the scheme which was given only a partial trial was not further tried.

Gratuitous Relief.

68. The dependants were relieved by means of cooked food on large relief works.

69. The form of gratuitous relief employed in this charge was by means of doles in corn. This form was chosen as it saved the labour of cooking and arrangements in connection therewith. This form appeared also to minimize the chances of fraud.

71. One poor-house was opened in this charge. This was opened when relief works were shortly to be closed. People of several classes attended, especially the low castes. The numbers were not however large.

72. There were hardly any such instances. No.

73. Yes. The inmates left the poor-house as the prospects gradually improved or when they were weeded out.

74. There were no kitchens except at the relief works and the radius was fixed to be 5 miles.

75. The ration provided was Code ration and the meals were distributed twice at fixed times. The people were not allowed to take food away.

76. The Civil kitchens were opened generally close to relief works; but on road works as the work progressed, food was sent on carts and there distributed by a responsible person.

77. Admission to kitchens was restricted.

(1) The Special Civil Officer had to satisfy himself that

(*a*) The applicant was a dependant of the worker.

(*b*) That the applicant had a Dákhla from the Village Officers about his being unable to maintain himself and of his being within the fixed radius of the kitchen.

(*c*) That a worker had become unfit for labour.

74. (*a*) The ration of the poor-house was the same as given in Section 105 (*c*) of the Famine Code and it was of bájri or jowári. Yes. It was varied.

75. (*a*) The village gratuitous relief list was drawn up by the Village Officers and these were checked by Circle Inspectors, Famine Awal Kárkuns, Mámlatdárs and Divisional Officers.

76. (*a*) Payment was made at the Cháwdi in grain generally daily and weekly at the discretion of the recipients or convenience of the Bania.

77. (*a*) None.

78. Mostly Maráthas. There was no reluctance, as food cooked by Maráthas is accepted by all classes likely to attend relief works.

79. The persons in charge of kitchens were a Special Civil Officer, Kárkuns.....and peons working under him. The kitchens were supervised, and accounts checked by all District Officers and remarks were made by each on visit books, which were finally communicated to the Collector who passed final orders.

80. None.

Suspensions and remissions of land revenue.

82. The land revenue has remained in arrears as follows:—

Táluka.	Total Revenue.	Arrears.
	Rs.	Rs.
Mán	90,327	19,138
Khatáv	1,34,897	50,036
Khánápur	1,51,204	59,824
Tásgaon	1,56,127	7,989

Orders about remissions and suspensions are not yet definitely passed. Inquiry is being made in the case of each individual defaulter and the remissions and suspensions will have to be settled after the completion of this inquiry which is a very labourious task.

83. Both will have to be taken into consideration. The information will have to be obtained from the Village Officers, then checked by Circle Inspectors or General duty Kárkuns, then by the Mámlatdárs and checked by the Divisional Officers. Complaints about wrong information will be inquired into by the Divisional Officers.

84. Remissions and suspensions are left to be determined after the arrears are ascertained.

85. There is no Zamindári system here as in Bengal.

86. Not up to now at least.

General.

87. Yes. There was famine in the district in 1891 which was followed by one in 1896 and by the one now under inquiry. The resources of the people were exhausted. As the people were also quite aware of the consequences of the famine of 1876 they availed themselves of the relief as much as possible.

88. No.

89. The relief workers generally belonged to low castes, Mahárs, Rámoshis, &c. There were occupancy and other tenants, but their number was small in proportion.

90. The people were found to be more ready now than at any time before. Frequency of famines has overcome their various prejudices. They have gained from experience of past famines which have occurred often within the time of their memory. Besides systems of relief are being gradually vastly improved so as to be as much effective as possible in relieving distress.

91. They seem to be more reluctant now than in previous famines. In times of famines private credit is very low and Tagái, by which one could maintain himself by starting some private work, has greatly diminished the tendency to contract private debts.

92. I think so.

94. In villages the statistics are maintained by Village Officers and in Camps by Civil Officers. These are as rule checked by all higher District Officers.

95. The high mortality where it was observed was found to be due only to cholera.

96. It was impurity of water caused by insufficiency, &c., which evidently gave rise to cholera. The wells were cleansed. New holes were made in Nalas to increase the supply. Tagái free of interest or money from the special grant for water-supply was given to people possessing wells and who offered to place their wells at the disposal of the public. Permanganate of potash was used on relief works and in Municipal areas once and again if necessary.

97. No other special arrangements were made nor did any seem necessary. Those in force had the desired effect. The arrangements were supervised by Medical, Public Works and District Officers.

98. There was a regular inspection. Whenever anything wrong was discovered it was checked at once.

99. The people were found to supplement their food with fruits of wild fig trees, dried, powdered

and mixed with flour to make bread. This did not seem to tell upon their health in any noticeable degree.

100. The proportion was insignificant.

102. There were only 20 orphans. They were finally taken charge of by their relations.

103. Circumstances have not come to notice to lead me to make any suggestions regarding the further classification of the object or improvement in the management of the funds.

104. No.

104. (*a*) There were no such arrangements. The assumed consumption of the people imported was reported by the Mámlatdárs in their fortnightly reports. I do not think this was quite accurate.

105. None.

106. Only where wells have been sunk—

(*a*) Double cropping has naturally increased.

(*b*) This is attempted in the case of garden crops when food-grains are grown sufficient for maintenance.

107. Ordinarily and not in times of famine does the practice prevail for evident reasons. I think that cash wages have risen in sympathy with the rise in prices.

109. The number of Staff Corps Officers employed were 2 and there were no Native Officers of the Native army or Non-Commissioned Officers of the British Army employed in minor posts. I think officials of the Judicial and Educational Departments can be drawn.

110. This agency was used in collecting subscriptions and in distributing charities. This was successful wherever it was tried. I think it can be extended to supervise payments at works, kitchens, poor-houses and village doles in large towns where men of education and respectability can be found.

111. The death-rate was never high during the time the famine lasted except at the time of cholera. The number who attended the relief works was not any time appreciably disproportionate nor did their condition deteriorate so as to attract attention. There was no appreciable variation in effect. The workers in places more conveniently located than others in point of water, shelter, &c., seemed to pull on better than others not possessing such advantages.

112. No such complaint has come to my ears either in official inquiry or in private talk with officers on relief works at least in these parts. I can imagine such results but have not noticed facts to prove them.

B. R. HEBLIKAR,
District Deputy Collector, Sátára.

Dahiwadi, 11*th January* 1901.

Mr. Hardevram N. Haridas.

Answers by Mr. Hardevram N. Haridas to the questions drawn up by the Famine Commission.

1. When the rains commenced in June 1899, people were hopeful. The character of the harvest in the two preceding years was bad.

2. The kharif sowings were very much below the normal. Only about 70 per cent. of the normal area was sown.

3. The average rainfall in the district during the rainy season is about 40 inches. The actual rainfall in 1899 was between 15 and 20 inches, *i.e.* 40 or 50 per cent. of the average.

The rain ceased in the latter portion of July.

There was no proper distribution of rain even in June and July. There was much rainfall in June, less in July and none after.

4. In the land actually sown the outturn was about 25 per cent. of the normal.

6. The necessity of relief was assumed from the extreme distress that made itself evident. As far as I can say no test works were opened.

11. Poor-houses were opened at Surat under the control of a committee and at several other places in the district.

11 (*d*) In Surat and Ránder private funds were raised to establish cheap grain shops.

(2) The Mahájan fund was utilised for relief to respectable poor in the city of Surat.

(3) The Mahájan also established a home for destitute children.

(4) The Mahájan also made contribution on each grain store towards administering relief.

14. Irrigation can be made in our district. More about irrigation will follow hereafter.

The digging of wells was not to my knowledge encouraged to any extent. Some people did resort to well irrigation, but on account of limited means of the rayats the measures were not successful in producing any effect on crop prospects.

19. Large work was opened at Barbodhan in Olpád.

34. Complaints have reached me that the scale of wages adopted was inadequate.

52. Small village works were not undertaken.

60. There are many aboriginal tribes in the district. Great unwillingness to take relief was shown

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by the tribes. Relief had to be taken home to many. The measures taken to distribute relief were not very successful.

63. No special measures as far as I know were taken to relieve artisans in their own crafts.

66 & 67. Attempts were made to import fodder for the cattle, but in spite of the best efforts there was heavy mortality amongst the cattle.

82. I do not think there were any remissions or suspensions of land revenue, because nearly 90 per cent. of the revenue was collected. I am informed out of this 90 per cent., only 5 per cent. was taken from the rayats and 85 per cent. from the Sávkárs. I shall dwell more fully on this question hereinafter.

87 & 88. The following figures will show that in the parts of the district most affected by famine, very large numbers had to be relieved. I made inquiries in about September last. At that time in the village of—

(*a*) Párdi in Mándvi, with a population of 550, there were 123 on dole.

(*b*) Amba in Mándvi—population 668, 161 on dole.

(*c*) Kurowli in Mándvi—population 563, 101 on dole.

(*d*) Nanicher in Mándvi—population 592, 253 on dole.

(*e*) Moticher in Mándvi—population 1,163, 250 on the dole.

In the poor-house at Mándvi there were over 1,100 persons. The people in Mándvi supplemented their doles by eating flowers and tamarind leaves. As a necessary consequence, these Káliparaj people suffered very much through famine-diarrhœa. The relief was very insufficient throughout. The heavy mortality tells its own story.

89. The people in receipt of relief generally belonged to the Káliparaj.

90. Even the poor Káliparaj evinced the greatest dislike to go on relief: they preferred to die at home than go to works. Relief had to be taken to them. The danger is not of people being very ready to seek relief, but of many being excluded from relief on account of their not going to works. A proper system which would take into consideration this factor—people's unwillingness—should be adopted. Even during the worst famines people in India would be most reluctant to keep body and soul together with other people's money.

95 & 99. I have already stated that in Mándvi people did resort to rank vegetation to satisfy the craving of hunger. In Morkántha in the Olpád Táluka the distress was so great that Kolis lived on Moras, a salt sea-weed. There was very large mortality amongst the Kolis. Famine-diarrhœa—miscalled cholera—was carrying away large numbers of

these Kolis. It is stated that the mortality was so great in Mándvi that in the course of about a week, more than 3,000 died of "cholera," which, I think, means famine-diarrhœa, the result of semi-starvation and feeding on wild vegetable products.

102. Orphans were handed over to the—

(1) Friends and relations,

(2) Missionaries, and

(3) Mahájan home for destitute children.

104. Complaints did reach us of the insufficiency of rolling stock, and the delay in getting waggons for fodder, &c.

105. Relief works were so far distant from some of the distressed parts and so few, that there were many who suffered from want of assistance, so no complaints of the nature implied in this question was possible.

110. Non-official agency was made use of during the famine for the maintenance of orphans, establishment of cheap grain shops and distributing relief. It was successful. And there is scope for its extension.

H. N. HARIDAS.

Surat, 13th January 1901.

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Mr. HARDEVERAM NANABHAI HARIDAS.

Supplementary answers by Mr. Hardeverám Nánábhái Haridás to the questions of the Famine Commission.

IRRIGATION.

In bad years like the one we are passing through, the need for artificial watering becomes very pressing. The danger of crop failure would be very much minimised if some means of supplying water to the *khedu* were adopted by the State. The State may help the khedu by liberal allowances for digging wells. It may also grant liberal aids to private individuals or companies who undertake to start works for supplying water to the khedus by means of steam pumps, digging artesian wells, etc.

If some portion of the revenue were devoted to construct canals or dams annually even in good years, thousands of bighas can bear very good crops and save the State much money in the time of famine. The famine relief as now administered does very little permanent good.

Every year heavy floods rise in the Tápti and the Narbada and immense volumes of water run into the Indian Ocean without doing any good to the country around. I should think this water or at least some portion of it should, by some artificial means, be utilized and stored up and used for land irrigation. By a properly formulated scheme prepared under the best expert advice, the flood water may be so distributed in canals, dams, tanks, etc, as to form good source of water-supply in dry season and at the same time the danger of heavy damage which the country often suffers through the floods destroying the crops would in fact disappear.

I have no doubt that if some scheme of the kind hinted above is adopted failure of crops on a large scale would be an impossibility.

CROP, ETC., REPORTS.

I cannot understand the significance of Question 5. Surely the village officers do from time to time make reports about crop prospects, rainfall, difficulties, etc., in collecting revenue and general state of the rayats, *i. e.*, how far they are able or unable to bear the State revenue and how far they are able to maintain themselves and their families. If these reports do go regularly to the higher officers they must be always in a position to predict any impending failure of crops. Why should they wait till there is a crop failure or till the so-called test-works are opened? The distress does commence to a very large extent before the officers are aware of the crop failure. I am afraid there is either—

I (*a*) some flaw in the system of reporting adopted by village officers;

(*b*) that these reports are not carefully prepared and hence they do not truly represent the prospects of season; or

II those responsible are slow or reluctant for reasons not before the non-official classes to adopt speedy measures for meeting the distress.

Perhaps all the three causes operate together.

I think if there is an efficient system of prospects reporting even the probable extent of an impending calamity can very easily be estimated. On the appearance of the first symptoms some scheme of immediate relief to the khedu should be adopted. A liberal and more extensive schem

even if a little extravagant, is more advisable than one which advocates stingy parsimony

In the Surat District the line of action adopted in the matter of opening relief works and affording relief assistance seems to have been highly objectionable.

For some months after the famine became inevitable no effective measure seems to have been taken to open relief works. Some work was opened at Barbodhan, Olpád Táluka. It was what may be called a big work. It did do much service but it was in itself not enough to afford relief to thousands in the district for whom very, very little, next to nothing, seems to have been done. The Barbodhan works did afford some relief to even a few in Olpád Táluka. But strange to state that when the distress was the greatest these Barbodhan works were closed, and instead of Barbodhan, works were opened at Areth in Mándvi and in other places not near the affected parts in the Olpád Táluka. The Olpád people then had no near relief works to go to, and I am afraid many must have died on account of the closing of the Barbodhan works.

The distress in Olpád was very great. I really cannot say at whose instance the Barbodhan works were closed. Cheap grain shop might have been opened at Ránder and some Local Fund money might have been distributed. But the help so given was very, very little. Surely the authorities might have found some means of helping the people in Olpád.

No big work scheme will prove of much success in relieving distress. People are naturally reluctant to go to works and the great distance which they have to go to find relief on such works proves an additional factor to detract from their usefulness. Even the great mortality in some works frighten the people to a very great extent. They would prefer dying in their own villages rather than on the works. I am afraid the system of cattle relief was not efficient. Large mortality of cattle in the district testify to the inefficiency. I may say from information that more than 50 per cent. of the cattle succumbed to starvation.

Large relief works may have a place in relief programme. They serve some useful purpose.

Small village relief works also must have a prominent place in relief programme.

I should suggest, however, that as soon as the prospect reports show an indication of a bad year steps should be taken that the ordinary industrial life in the villages should not be disorganised. Some system to take both work and wages to every one likely to suffer should be framed and adopted.

It is a great mistake in my opinion to think of famine measures only when famine is amongst us.

Once it has assumed gigantic proportions, nothing that the State can do will check its progress or magnitude. It is beyond the means of the State to meet with such a big calamity, the existence of which the State becomes aware when it is too late. A portion from the Imperial revenue should every year be actually expended even in good times in measures which will give the country some strength to bear calamities like famine. The State may undertake and encourage irrigation works, industrial and agricultural education—works, in short, calculated to improve the material prospects of the country. Some such measures were, I think, recommended by the Famine Commission of 1880 or 1881. Not much has been done, I am afraid, in Surat or elsewhere to adopt any of the recommendations of the Famine Commission of 1880-81.

Collection of Land Revenue.

In my previous communication I have stated that nearly 85 per cent. of the revenue was collected from the sávkárs, only 10 per cent. being collected from the khedu. We can only infer under the circumstances that the authorities had to adopt this course of recovering land revenue from the sávkárs, because it was impossible to recover it from the khedu. The khedu were in a state of chronic poverty. A large majority of them had no means of subsistence. In Mándvi, the distress was so great that many of the Káli Paráj had to sell even the bamboos of their huts and were practically homeless. What a sad story! Even without being subject to any pressure for the payment of Government due and at the first symptoms of distress numbers have to go homeless and sell even the bamboos of their huts! Such a state of poverty can hardly be imaginable. To collect revenue from such was out of question. The problem for the poor was how to drag out an existence. Under these difficulties we can well understand that sávkárs were tapped. I am of opinion that the recovery of revenue from the sávkárs has no authority in, and is in direct violation of, the provisions of law. An inquiry into the legality of the mode of recovery is not pertinent to scope of this paper. Even conceding, and I do most frankly make that concession, that the action of the officers concerned was the direct result of their consideration for the welfare of the rayats, I am of opinion that this kindness will result in the total ruin of the khedu. "Government revenue had to be collected to the last pie. Remission meant loss of so much revenue: suspension could not be granted, because it would be impossible to recover much revenue from people in such state of indigence even at some future time in succeeding years. The sávkár was there, he had rayat's money and he must pay. Government gets its full revenue and khedu escapes payment." Some such similar kind of logic represents what most likely was passing in the minds of the officers. To properly realize the extent of the mischief done by forcing the sávkár to pay the revenue, let us examine how far the khedu has to depend upon the sávkár. The sávkár is an important factor in the khedu's life. No doubt, in most cases the khedu is in the clutches of the sávkár. No doubt the khedu is only a serf on his own land. I may even go so far as to concede all that is said senseless or sensible against him. But it is an admitted fact—it may sound paradoxical—that the sávkár is the khedu's only support. The sávkár is as important to the khedu as the food he daily takes. The khedu wants money for his domestic wants; he wants money for his trade; he wants money to pay Government revenue. He has no capital of his own. He must go to the sávkár. The khedu in his poverty is in himself an unsafe security for any money-lender. The only security which is likely to pay the sávkár for the money he advances is land in possession or occupancy of the khedu. In proportion as the khedu's poverty increases his credit decreases. Want of credit on the one side and the increasing want of money on the other both combine to encourage the sávkár to press the screw a little too tight on the khedu. Any measure which injuriously affects the khedu's credit and makes it difficult for him to get money will only tighten the sávkár's grasp. And naturally so.

This year the Government have recovered money from sávkárs. The result already is, the khedu's credit is diminished and he finds it impossible to find money even on the security of the land. The recovery of the revenue from the sávkárs has in fact increased his indebtedness to the sávkár. He will have to pay the revenue, and decidedly interest to the sávkár. In spite of the good intentions of the officers, the liability of the khedu to pay his sávkár can and will never be extinguished. The sávkár will recover, the khedu will have to pay. The khedu will lose his all. I am afraid he has lost all. Sávkárs have already begun to refuse, I am informed, lending any money to khedu. Even if they have

not done so and if the present policy is to be followed in future years, he will refuse to make any advances to the khedu. The khedu having no money and lost his credit, will be still more exposed to the exactions of the sávkár. Even if advances are made by the sávkárs they will be only on terms most ruinous to the khedu. The result will be that either the khedu will be still more hopelessly in the clutches of the sávkár or be totally ruined. Has not the State with the best intentions in the world contributed to a large extent to bring about this result? And yet I was surprised that some gentleman in office had not much to say when he was speaking about this method in the Legislative Council as to what is expected as the result of this mode of collecting revenue. Well may the khedu in more sense than one say, "Save me from my friends."

Even the sávkár will collapse in the long run by the ruin of his constituents. What will become of the khedu then?

Legislation for the protection of the khedu is talked of. Such legislation will do but little good. The best remedy is to find means for the improvement of the material condition of the khedu by relaxing the demand for revenue, by constructing works of importance, by initiating a proper system of industrial education and by encouraging good agriculture, but above all by making money more accessible to the khedu. The only way of protecting him from the old sávkár is to create a new sávkár in the shape of Agricultural Banks from which the khedu can get easy advances for all his wants. Capital is the cry. Supply it and increase it.

The Government will be well advised, I think, to take up the question of the extreme poverty of the khedu in right earnest. They may also institute a sort of an industrial and economical survey and consider seriously the question, "What should be done to develop village industries and to supply capital to the poor."

Famine Orphans.

I am afraid the famine has left many thousand orphans quite helpless. Some have found their way in charitable homes for destitute children like the one we have in Surat and of which I am Honorary Secretary. In this home we have about 150 children of all ages. We give them food, clothes and medicine. We have recently opened a primary school for them and soon shall open an industrial school and, if funds permit, shall have an agricultural farm, etc. Our home is maintained till now for more than six months entirely through charitable funds. Some have been taken up by the Missionaries. It may be mentioned in this place that almost all of these are chiefly maintained from charitable funds. But a large number remain unhelped.

These orphans have to be fed, educated, and given a decent start in life. Orphanages like the one I am in charge of can impart industrial and agricultural education and take charge of them. But what is to become of them when they grow old? In fact they belong to no one. Unless institutions like ours have sufficient means to give them a start in life or to establish village settlements for such orphans, their fate is difficult to comprehend. We may establish model industrial and rural villages on sound economical principles. I am sure such villages will directly or indirectly produce many beneficial results. It is beyond the scope of this paper to discuss all possible schemes. But where is the money to come? Community has done much. It will do much in the way of famine relief. But the State is bound to do all it can to provide for and improve the prospects of the famine children. Up to now, as far as I know, very little is done by the State for the orphans, who

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should be the first charge on the revenue. In theory the State is the parent of all children. Let it be so in practice. The community, if properly helped by the State, will take up the case of the children. I suggest that very liberal grants should be made irrespective of caste or creed for the maintenance of orphanages, and the State should make the large grants of land, money, etc., for the maintenance of these orphanages and also for the establishment of industrial and agricultural school and village settlements I have just mentioned to be conducted under the auspices of private bodies. The State must also as parents of the Hindu and other non-Christian children regard itself as Hindu and non-Christian and must not show partiality towards proselytising bodies, who are ever ready for an opportunity to make "Real Christians" and who are backed up by all the wealth of Europe and America. Such proselytising bodies being richly endowed, do not stand in need of much State help. The question of the famine orphans ought to have occupied a prominent place in the deliberation of the Commission. It would have been far better if the question was more fully gone into by Commission. Enquiry may be instituted how far the famine works that were undertaken will be permanently beneficial to the country.

HARDEVERAM NANABHAI HARIDAS.

Surat, Gopipura, 21st January 1901.

Ra'o Sa'heb Sakarlal Chandulal Desa'i.

Replies by Ráo Sáheb Sakarlal C. Desai, Mámlatdár of Mándvi, in the Surat District, to the questions drawn up by the Famine Commission.

Introductory.

1. When the rains of 1899 commenced the táluka was in its normal condition. Though the economic condition of the Kaliparaj (aboriginal tribes), who form nearly three-fourths of the population of the táluka, is always unsatisfactory—famine, plague or any other calamity had not affected its prosperity and the agricultural stock and other resources were sufficient. The rainfall during the two preceding years was generally seasonable and sufficient, and the condition of the crops was on the whole fair. In 1898-99 jowari, wheat, nagli, korda, gram, udid and kapas had yielded 10 to 12 anna crops and the other crops were not below 8 annas. The crops in 1897-98 were also about 10 annas.

2. In the famine year the area sown with kharif crops was 61,478 acres 14 gunthás, or 92 per cent. of the average. The areas under cultivation (both khárif and rabi) in the three preceding years were as under:—

Year.	Area cultivated. A.	g.
1896-97	74,020	38
1897-98	75,058	23
1898-99	76,278	2

Thus the normal cultivated area was 76,278 acres, and 81 per cent. of the area was sown in the year.

3 (*a*). The average rainfall of the táluka during the rainy season is 52 inches and 1 cent.

(*b*) The actual rainfall in the rainy season of 1899 was 12 inches 62 cents., or 24·6 per cent. of the average.

(*c*) The rains ceased on 10th September 1899. The rainfall on that day was only 18 cents.

(*d*) The distribution of the rainfall from June to September as compared with the average was as under:—

Month.	Actual rainfall.	Average rainfall.
June	9·16	8·6
July	1·58	24·74
August	1·50	9·32
September ...	0·38	6·93

4. The normal cultivated area is 76,278 acres. In 1899 khárif crops were produced in 6,410 acres. The yield of the crops was about $3\frac{2}{7}$ annas. The actual khárif harvest was about 3 per cent. of the normal harvest on the normal cultivated area and the rábi harvest was about 2 per cent. But though the crops had so far failed, fodder (both kadab and

grass) had abundantly grown up; kadab was produced in 31,291 acres (34 per cent. of the occupied area) and grass in 20,733 acres (about 23 per cent. of the occupied lands), about 300 bundles of kadab and about 2,000 lbs. of grass were produced per acre and the prices of both grass and kadab were very high throughout the year.

5. The total population of the táluka is 52,211, out of which 28,008, or nearly 52 per cent., depend exclusively on agriculture as petty cultivators and 16,104, or 31 per cent., are agricultural labourers (including dependants).

Preliminary Action.

6. With the first indication of distress, reports regarding the state of the crops, the condition of the people and the increase of crimes due to scarcity and rise in prices were submitted to the Collector, and under his orders Sathaváv test-work was opened on 26th November 1899. The work attracted more than 7,000 people (about 13 per cent. of the population) which indicated that serious distress existed in the táluka. Other relief measures were subsequently undertaken.

7. The following facts indicated the existence of distress and the necessity of relief measures—

(1) Rice of more than 30 per cent. in the market prices of the staple food-grains.

(2) Increase of crime due to a general rise in prices, and to a scarcity of food. About 25 dacoities and robberies and a number of petty thefts were committed in the month of September for plundering the food-grains.

(3) A large increase in the number of beggars and wanderers in the towns of Mándvi and Boudhan.

(4) Migration of a number of labourers to Surat and other places in search of employment.

8. The first relief measure undertaken was the opening of the Sathaváv test-work by the Local Board on 26th November 1899. In order to gauge the extent of distress, the provisions of the Famine Code regarding the relief works were strictly complied with. The workers were divided into gangs. Payment was made according to results and the wages given did not exceed the famine wages according to the Code. The test-work lasted 8 days and nearly 7,500 persons (about 14 per cent. of the population) were attracted to the work. Most of them were agricultural labourers who were unable to get work on account of failure of crops. A small number of petty cultivators who had no fodder also went to the work. The test-work was closed on the 3rd December and Karanj Relief Work was opened on 6th December under the Public Works Department.

9. The lists of relief works with surveys and estimates are not kept in the táluka office. In the month of September 1899 lists of relief works were

prepared and submitted to the Collector. The estimates of cost and survey were made by the Public Works Department.

10. According to the Commissioner's order only large public works were included in the relief programme. The programme of small village works was ready from the beginning as it is maintained by the Táluka Local Board.

11 (*a*). The test-work at Sathaváv was opened on 26th November and closed on 3rd December 1899. No other test-work was undertaken, but regular relief work was opened two days after the close of the test-work.

(*b*) There was only one poor-house at the headquarters of the táluka. It was opened on 22nd April 1900.

(*c*) (i) The kitchen on the Karanj Relief Work was opened on 5th January 1900 and on the Areth Relief Work on 26th April 1900.

(ii) In twelve large villages of the táluka, village kitchens were opened on 15th July 1900, but as they were found unsuited to the condition of this táluka and as many of the Kaliparaj refused to receive cooked food, the kitchens were closed in ten villages in about a week and only two kitchens at (1) Bodhan and (2) Tadkesar were maintained.

(*d*) In the beginning of November 1899 the people of Mándvi collected about Rs. 600 for the relief of the poor. "Bhudka" was prepared and distributed to the poor from 3rd Decembr 1899.

(*e*) Government forests were not opened in this táluka.

12. For the purpose of village inspection and control, the táluka was divided into three relief circles in the month of January. The two permanent Circle Inspectors and one General Duty Kárkún were placed in charge of these circles. They were required to move about actively, to observe the general condition of the people and to supervise the distribution of gratuitous relief in villages.

In March when the distress became more acute a famine Aval-kárkún was appointed, to whom a portion of the táluka was assigned. His duties were similar to those of a Relief Mámlatdár. In order to enable me to move about more actively for village inspection and to supervise the Circle Inspector's work, I was relieved of a part of my ordinary duties at the same time.

In July when, on account of close of relief works, the work of village inspection and other famine work became heavier, another extra Aval-kárkún for famine duty was appointed and a portion of the táluka was assigned to him for village inspection and for enquiries into tagávi application.

(*b*) No arrangements were made to stimulate the local employment of labour.

(*c*) A committee of four persons was appointed to supervise the distribution of Bhudka in the

town of Mándvi. The accounts of the fund were kept by the Municipal Secretary.

13. Very few applications for loans were received before the beginning of January 1900, but from that time the demand for tagávi continued to increase.

The amount of tagávi granted for different objects during the year is as under :—

Under Land Improvement Act, 1883.

Rs.	
6,135	for irrigation wells.
34,046	for other improvements of land.

Under Agriculturists' Loans Act, 1884.

Rs.	a.	p.	
22,065	0	0	for the purchase of seeds.
12,127	0	0	do. bullocks.
6,759	0	0	do. grass.
6,031	8	0	for subsistence to poor cultivators.
1,100	0	0	for rebuilding of houses destroyed by fire.

Most of the loans were given on the security of lands. In a few cases personal security was accepted and three sureties have been taken in each case.

Loans have been granted to all the classes of *boná fide* cultivators—Pársis, Rájputs, Bohorás, Kachhiás, Kolis, as well as to the aboriginal tribes (Chodhras, Gamtás, Dublás, &c.). Out of the total amount, Rs. 58,487-8-0 have been granted to the Kaliparaj and Rs. 29,876 to other classes. Nearly 90 per cent. of the amount advanced will probably be recovered.

14. Irrigation wells can be made in the southern and western parts of the táluka as well as in the villages on the bank of the River Tápti. On the cessation of the rains of 1899, the average depth below the surface of water was about 6 feet in these villages. In the forest villages and where the lands are stony, many of the wells had dried up in January and in others the average depth was about 2 feet. The digging of wells was encouraged by loans and almost all the applications for tagávi were sanctioned. The total amount granted for the purpose is Rs. 6,135, and 32 new irrigation wells have been constructed in the year. As these wells were constructed after January 1900, they were not useful for the purpose of saving last year's crop, but they were successful as a permanent improvement as well as a temporary measure to employ labour.

15. Before regular relief works were opened in the táluka, Sathaváv tank work was undertaken. The work was sanctioned by the District Local Board as a test-work, and it was conducted under the supervision of the District Deputy Collector and President of the Táluka Local Board and of the Mámlatdár.

16. On the test-work, the labourers were divided into gangs, and task was prescribed for each gang.

The work was measured out by the overseer or sub-overseer and payment was made according to result. Each gang consisted of a number of men, women and working children. The task of a woman was calculated for payment at 75 per cent. of that of a man and of a working child 50 per cent. Men were generally employed as diggers and women and children as carriers. Previous occupation of the workers was not taken into consideration, but most of the labourers belonged to the labouring classes.

17. Payment on the test-work was made according to results, but no worker was paid less than the minimum wage according to the Famine Code. No allowance was granted to the dependants or for rest-day.

18. Though the labourers were given famine wages on the test-work and though no allowance to the dependants was paid, nearly 7,500 persons (about 14 per cent. of the population of the táluka) were attracted to the work. These facts indicated that serious distress existed in the táluka and regular relief works were required.

Small Village Works.

52. Small village works were not undertaken by Government, but two small works were opened by the Local Board for giving employment near their homes to Kaliparaj people, who refused to go to the relief works, after the outbreak of cholera in the month of May. They were (1) Mándvi-Devgad road and (2) Moticher road.

53. Both the works undertaken by the Board were road works.

54. They were conducted under the supervision of the Local Fund Overseer and the members of the Táluka Local Board.

55. They were not conducted by means of non-official agency.

56. In the beginning payment was made in strict proportion to results. Subsequently minimum wages according to the Code were given to females and working children, and to the males one pice more than the minimum wage was given.

Employment was given to every one who wanted it.

57. The system of selection of applicants was not tried.

58. Both the works were more than 12 miles distant from the large public works, and labourers were not drawn from the relief works.

59. In my humble opinion small village works are more suited to the condition of the Kaliparaj and other backward tribes than large public works and relief can only be administered satisfactorily to these people by means of small works. They dislike to live together in large herds. They are incapable of working steadily under discipline. They would rather starve or eke out a miserable

existence at their homes than to go to a relief work at a distance from their villages. All possible measures were taken to induce these people to go to the relief works, but many of them obstinately declined and majority of those who went to the works left the work after staying there for a short time. To prevent death from starvation many of them were admitted to the dole list.

Special Relief.

60. Nearly 74 per cent. of the population of the táluka are Kaliparaj (aboriginal tribes). The principal of them are :—

Name of the tribe.		Population.
Dublás ...	...	4,722
Bhils ...	...	5,164
Chodharás	...	23,129
Gamtás ...	...	5,032
Dhodiás ...	...	165
Total	...	38,212

No special test were applied to them. When the test-work at Sathaváv (which is situated in the centre of the Kaliparaj villages and where fuel is available) was opened they were forward to take relief, and about 7,500 Kaliparaj (about 20 per cent. of their population) had gone to the work. But when the test-work was closed and relief work was opened at Karanj, which is more than 12 miles distant from the nearest Kaliparaj village and more than 15 to 20 miles distant from many of their villages in spite of the efforts of the Talátis, Circle Inspectors and other relief officers, many really needy Kaliparaj sullenly and obstinately refused to go to the work, and a majority of those who went returned after a short stay. They alleged that :—

(1) The climate did not agree with them ;

(2) the distance of the work from their villages was too great;

(3) they could not leave their cattle and houses ;

(4) the weekly payments did not suit them ;

(5) they could not earn sufficient for their maintenance;

(6) they cannot obtain sufficient fuel.

In April when the relief work was opened at Areth (which is a Kaliparaj village) the number of relief workers rose to about 3,000 in one week and it was expected that many others in need of relief would go to the work. But cholera unfortunately broke out and many of the workers returned to their villages in consequence. To prevent deaths from starvation many of the refugees from the relief works and others were admitted to the dole. From that time a large number of Kaliparaj, especially the Chodharás, showed great reluctance to go to the work. Two Local Fund works were opened to give employment to these people near their homes. Only the people of villages in the vicinity of the works went to the works.

61. Forest works were not opened in the táluka, but grass-cutting in the jungles was undertaken by the Forest Department. The work was commenced on 20th September and closed on 30th November. The total expenditure incurred was Rs. 1,982, and it gave employment to a number of Kaliparaj people.

62. Able-bodied persons were not engaged at any time on works of private utility at public expense.

63. There are only a few artisans (weavers and others) in this táluka. They were able to earn their livelihood in their own crafts; and it was not necessary to render any assistance to them.

64. As the artisans (weavers, &c.,) were able to maintain themselves in their own crafts, it was not necessary for them to go on ordinary relief works.

65. No such measures were taken.

66. Scarcity of fodder was felt in only 20 western villages. In other parts of the táluka fodder was plentiful. Free passes for cutting grass from the jungle were issued to poor cultivators who had no fodder, and to well-to-do cultivators in need of fodder. Grass from the forest was sold at the rate of Rs. 2-3-0 per 1,000 lbs. Besides, in April 54,500 lbs. of grass and in July 18,000 lbs. were distributed free to poor cultivators.

67. Operations were not undertaken in this táluka for supplying compressed grass to other places, but free passes for cutting grass from the jungle were issued to the cultivators of Olpád Táluka.

Gratuitous Relief.

68. On large public works the dependants of the workers were relieved by the distribution of cooked food. At no period the allowance to the dependants was paid in cash. Small village works were not undertaken by Government, and on Local Fund works no allowance was paid to dependants.

69. Gratuitous relief in villages by the dole was most employed in this táluka, because it was most suited to the local conditions than other forms of gratuitous relief. Most of the recipients belong to the Kaliparaj (aboriginal tribes). These people are very superstitious, and they do not take their meals even in the presence of other members of their families. Besides, the different tribes object to eat food prepared by members of other tribes.

70. Most of the recipients of gratuitous relief in villages belong to the Kaliparaj (aboriginal tribes). A few Kolis and Bohorás, who were eligible under Section 57 of the Famine Code, were admitted to relief, but their number was always insignificant. These classes are always reluctant to accept gratuitous relief and special test were not applied to them.

The recipients of gratuitous relief were selected by the Circle Inspectors and other relief officers.

71. The poor-house at Mándvi was opened on 22nd April 1900. Most of the inmates of the house were Dublás, Chodharás, Gamtás, Bhils and Wasávás. The number of inmates was largest in July when it exceeded 900 persons. No other poor-house was opened in the táluka.

72. Vagrants and immigrants were admitted to the poor-house if unfit for work. Also persons who refused to go to relief works were admitted, if in danger of starving. Orphans, sick and incapable persons eligible for dole were also sent to the poor-house by Circle Inspectors and other relief officers. Persons who refused to work on the relief works were not sent to the poor-house as punishment.

73. The inmates of the poor-house were inspected from time to time by the Superintendent, Mámlatdár and other officers, and persons fit for work were sent to the relief works. After the rains broke, such persons were sent to their homes, as work was then available in the villages.

74. Before the rains broke, village kitchens were not opened in this táluka. In the month of July kitchens were opened in 12 villages, but as they were not suited to the local conditions they were closed under the Collector's orders in 10 villages after a week and were kept open in only 2 villages. Each kitchen was expected to serve the villages in charge of one taláti (usually 3 or 4 villages).

75. In the village kitchens minimum ration prescribed in the Famine Code was provided. Meals were distributed twice, once in the morning at about 10 A.M. and in the evening at about 6 P.M. The people were compelled to feed near the village Chouri where the food was prepared and they were not allowed to take food away.

76. Civil or village kitchens were opened after the closure of relief works.

77. The admission to kitchens was not free. When kitchens were first opened, all the dole recipients were admitted and afterwards only those persons who were eligible for the dole were admitted by the Circle Inspectors and other relief officers.

74A. In the poor-house minimum ration prescribed in Section 105 of the Famine Code was provided. The morning meals consisted of rice and dál and in the evening jowári bread and vegetables were given. In case of sickness or weakness milk, kanji and other articles were provided by the Hospital Assistant.

75A. The village gratuitous relief lists were drawn up by the Circle Inspectors and they were checked from time to time by the Mámlatdár Famine Aval-kárkúns and other higher officers. The dole recipients were also inspected by the above officers from time to time. Generally the recipients were inspected by these officers at least twice every month.

76A. Grain was distributed daily in the morning to the dole recipients by the village officers at the village Choura and in villages where there are no Chouras at the house of the Pátil. Payments were not made in cash at any time.

77A. Before the outbreak of cholera in the beginning of May, gratuitous relief in villages was given only to those who were eligible under Section 57 of the Code. After the outbreak most of the workers deserted the work and returned to their homes and the epidemic spread throughout the taluka. Dysentery, diarrhœa and fever also prevailed in many of the villages, and the distress became more acute and the condition of the Kaliparaj became very miserable. At that time refugees from relief works, sick persons and others who were in danger of starvation, whether able-bodied or not, were put on the dole lists.

(2) When cholera abated all persons who were not fit for work and all others who had some good excuse for remaining in the villages, such as to take care of cattle, to prepare land for cultivation, were kept on the dole list.

(3) In the rainy season when the relief works were closed, gratuitous relief was given to the dependants of the destitute cultivators while engaged in cultivation. Poor cultivators who were ineligible for subsistence tagávi and who did not receive allowance for subsistence from the charitable funds were also kept on dole.

78. In the poor-house and in village kitchens, Chodharás were employed as cooks. As other Kaliparaj eat food prepared by the Chodharás, no reluctance was shown by the people of these tribes to take food cooked by them. In Boudhan and Tadkeswar kitchens, where there were some Bohorás and Kolis, they objected to take food prepared by the Chodharás and they cooked their own food separate.

79. The village officers (Patel and Taláti) were in charge of the kitchens. Grain was weighed out and handed over to the cooks in the presence of the village panch. The Circle Inspectors and other relief officers visited the kitchens from time to time. The Special Civil Officer was in charge of the kitchens on relief works.

80. Cheap grain shops were not opened in this táluka.

Suspensions and Remissions of Land Revenue.

82. The total land revenue of the táluka is Rs. 1,58,101-11-8, out of which Rs. 1,42,071-5-10 have been collected and the arrears amount to Rs. 16,030-5-10. The proposals for suspensions and remissions had been submitted to the Collector, but they have been returned for further enquiry.

83. Though crops had failed in many places and in others they were poor, fodder (both kadab and grass) had abundantly grown up in many of the villages and the cultivators secured very high

prices for the same. The occupants who had fodder crops on considerable part of their holdings were able to meet the Government demand without difficulty. No consideration was shown to well-to-do sávkár landholders who hold nearly 35 per cent. of the occupied lands of the táluka. *Boná fide* cultivators who had not fodder on considerable part of their holdings and whose crops were less than four annas were not pressed for payment of revenue. These persons have been recommended for suspensions and remissions.

84. The enquiry regarding suspensions and remissions of revenue was commenced in June 1900. Though proposals have not been sanctioned as yet, no attempt was made to recover the arrears after that time.

85. There are no Jamindárs or holders of large estates in this táluka.

General.

87. The number of persons in receipt of relief exceeded 15 per cent. of the population of the táluka in the months of July, August and September. Most of the persons in receipt of relief were (1) petty Kaliparaj cultivators, (2) agricultural labourers who also belonged to the aboriginal tribes. The economic condition of the Kaliparaj cultivators is always unsatisfactory and their resources are scanty. Many of them are heavily in debt and entirely in the hands of the sávkárs who take away all the produce of their lands in ordinary years and afterwards provide them with subsistence, seeds and other necessaries. For some months these petty cultivators maintained their families by selling fodder, but their resources were soon exhausted. As their sávkárs refused to help them they were obliged to seek relief from the State.

The more substantial landholders (Pársis, Rajputs, Bohorás, Kolis, &c.), who usually employ the labourers were unable to do so on account of famine. Many of the Pársi and Rajput landholders dismissed their servants (Hális) on account of their inability to maintain them. As they were unable to get employment they were thrown upon State relief.

88. In my humble opinion relief would have been administered more satisfactorily to the Kaliparaj people if works were opened near the homes of these people from the beginning of January.

The Karanj Relief Work, which was opened at the outset, failed to afford relief to many really needy persons as they obstinately refused to go to the work on account of its distance from their homes. Many preferred to eke out a miserable existence at their homes by travelling long distances into the forest to collect grass, chaff, fuel or other jungle produce and sell their day's gathering for about half an anna or one anna. Many of them and their children became emaciated and had to be put on the dole list. In other respects, I am humbly of opinion

that the relief given was not defective. The relief given was not excessive at any period.

89. More than 95 per cent. of the people in receipt of relief belonged to the Kaliparaj tribes. More than 60 per cent. of them were agricultural labourers and the others were (1) petty occupants, and (2) tenants without security of tenure and their dependants.

90. There was no famine in this táluka in the last 50 years.

91. Many instances came to my notice indicating a contraction of private credit and a rise in the rate of interest. The sávkárs refused to assist their Aásámis as usual. Even the more substantial landholders found it difficult to obtain loans on the security of their lands.

Generally the people of this táluka did not apply for State relief until their resources were exhausted.

92. In my humble opinion the tests of the Code are sufficient to prevent persons not in need of relief from seeking it.

93. The tests of the Code are, in my humble opinion, sufficient and further tests are not needed. Any method of selection for admission to a large relief work would lead to confusion.

94. In municipal towns births and deaths are recorded by the municipal staff, and in other places by the village officers (Pátils and Talátis). In the towns relatives or other inmates of the house are required to give intimation of every birth and death to the Municipal authorities, and at other places the information is collected by the village servants. On works the births and deaths were registered by the Civil Officer and the Hospital Assistant in charge of the work.

95. The mortality in the famine year was very heavy. The principal causes of death were cholera, dysentery, diarrhœa and fever. These diseases were partly due to insufficient and unsuitable food. The Kaliparaj generally subsist upon nágl, bauti and kodra, but as these grains were not available in the famine year, they were obliged to eat Rangoon rice, which they complained was not suitable to them. Besides many able-bodied persons, and therefore ineligible for gratuitous relief, subsisted upon the ration supplied to their children and incapable relatives. Vegetables and other wild products were mixed with rice to supplement the food, and such insufficient and unwholesome food produced dysentery, diarrhœa, fever and swelling of the feet.

96. It does not appear that the increased mortality was due to impure or insufficient water-supply. In some of the jungle villages, scarcity of water was felt and a number of kutcha wells were constructed by the Táluka Local Board in these villages. The total expenditure incurred by the Board was about Rs. 520 on the relief works. Permanganate of potash was used to disinfect wells used by the relief

workers. The wells were disinfected once every week and after the outbreak of cholera twice every week.

When cholera broke out at Mándvi, Bodhan and other places, wells were cleaned and they were disinfected with permanganate of potash once every week.

97. At the poor-house, the sanitary arrangements prescribed in the Code were made. A sufficient number of latrines with bhangis were provided. Separate sheds were erected for the treatment of ordinary cases, diarrhœa and dysentery cases and of cholera cases, at a convenient distance from the poor-house. Arrangements were also made for sweeping the poor-house premises daily and for filtering water used by the inmates. The Hospital Assistant, Mándvi, was in charge of the poor-house hospital in the beginning, but when the number of inmates increased a Special Hospital Assistant was appointed.

On relief work the sanitary arrangements were made according to the Code.

No sanitary arrangements were made at the village kitchens. As the recipients of the relief attended the kitchen twice every day at meal times and then returned to their homes no sanitary arrangements were necessary. The sanitary arrangements on the works were supervised by the Medical Officer and the Special Civil Officer and at the poor-house by the Superintendent and the Medical Officer.

98. The grain shops on the works were regularly inspected by the Civil Officer. Inferior and unwholesome grains were found and their sale was prohibited.

99. Many Kaliparaj people supplemented their food with jungle vegetation and wild products. The consumption of these articles told much upon their health and they suffered from fever, diarrhœa and dysentery.

100. A number of people had immigrated from Nándod and Baroda State. About 8 per cent. of the persons relieved belonged to these Native States.

101. Most of the immigrants when they came into the táluka were in a very reduced state, and some of them were terribly emaciated. The mortality among them was much higher than the mortality of the táluka.

102. The orphans were made over to their friends and relatives at the end of the famine. Those who had no relatives or friends willing to take them have been sent to Surat Mahajan Anáthášhram.

103. The Report of the Famine Commission is not supplied to this office, and I am therefore unable to make any suggestion.

104. I have not heard any such complaints in this táluka, but in January and February, while I was Mámlatdár at Dahánu, many people of the

táluka complained that they were unable to secure wagons for exporting fodder to the distressed districts of Gujarát for 10 or 15 days.

105. I have not heard any such complaints in this táluka.

106. There has been no change in the character of crops sown of late years.

107. In all the Kaliparaj villages, the practice of paying wages in grain still prevails, though occasionally cash wages are paid. The Kaliparaj prefer grain to cash wages and there is no tendency to substitute a cash for a grain wage. Cash wages have not risen with the rise in prices, though higher wages are sometimes paid when there is much demand for labour.

108. The provisions of the Famine Code were complied with in all respects in this táluka except that gratuitous relief in villages was given to persons other than those mentioned in the Code (1) after the outbreak of cholera in the month of May and (2) in the rainy season when the relief works were closed. On both the occasions the extension of gratuitous relief was necessary for the preservation of life as explained in 77.

109. Staff Corps Officers were not employed in this táluka at any time. Rasaldar Mr. Bapat was deputed to this táluka for obout three weeks for supervising gratuitous relief in villages.

110. While making enquiries regarding the applications for free grants for seeds and subsistence from charitable funds, non-official gentlemen were consulted; non-official agency was not made use of in any other way. On account of the backward condition of the táluka, there is no scope for its extension.

S. C. DESAI,
Mámlatdár.

B 1437—4

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Kha'n Baha'dur Sorabji R. Master.

Answers by Khán Bahádur Sorabji R. Master, District Deputy Collector, Surat, to the questions drawn up by the Famine Commission.

Introductory.

1. When the rains of 1899 commenced the outlook was fair. If the rain had fallen only a few inches in September either in the beginning or at its end the year would not have been, as regards the winter crop, a bad one. If a few inches had fallen in July it would have been a fair one for kharif crop too. The heavy rainfall in the middle of June carried off the embankments of rice fields and washed off in many instances the tank embankments. The tanks were thus drained off. The rice fields, which depended upon them for water for irrigation and which paid special water-rates, could not get water from them when the rains held off. The crop in them consequently dried up for want of moisture and was not better off in any way than that in those rice fields which solely depended upon rain.

In 1898 the character of the harvests was poor, though not very poor. The rainfall was less than that in ordinary years. There was rain only in the middle of June with partial showers in July and August, but it entirely ceased in the middle of September. Kodra crop had consequently suffered. Rice crop was fair in the land accessible to tank water, but in other rice fields the yield was only eight annas.

The cultivators had also suffered from the low price of grain which ruled in the year. With a partial crop they had to sell the yield of it at a low rate of price and this helped to straighten their pecuniary condition.

In 1897 the rain was below the normal but seasonable and just sufficient for a fair crop, but the people suffered from plague, which appeared in towns as well as villages, and were therefore unable to reap all the benefits they expected from a tolerably fair season.

2. The kharif sowings were up to normal except the rice cultivation. Rice cultivation was $\frac{1}{3}$ of the normal and kodra and nágli was $\frac{3}{4}$.

The normal cultivated area was arrived from the Village Form No. 3, which gave the cultivation for each survey number. Each survey number was visited by the village officers and the cultivation noted in No. 3 with the area of each sort of cultivation. Test inspections were taken by the Táluka Kárkuns and Táluka officers. When the rain fell in June and the kayari lands were with water the rice

plants were not ready. When the rice plants were ready there was no water in the rice fields for transplantation. Most part of the cultivators were thus not able to transplant their rice plants in the rice fields for want of water in them. I have seen a good many rice plant plots given up to grazing when there was no hope of ever transplanting them in the rice fields.

3. The average rainfall in this Division is 73 inches :—

Chikhli	69
Párdi	78
Bulsár	71
	218

The rainfall in the Division was 31 inches :—

Bulsár	36·97
Chikhli	24·46
Párdi	31·40
	92·83

It was 42·7 per cent. of the average. More than $\frac{3}{4}$ths of it fell in the middle of June. About two inches fell in the month of July, about 3 inches in the month of August, spreading over almost all the days of the months. There was a fall of a few cents in the month of September. It ceased entirely from the middle of September. In Chikhli, however, the fall in September was of about 2 inches, but it had fallen after a long interval. The jowári crop in Chikhli was consequently a little better than the kodra crop of Bulsár and Párdi.

In ordinary years the average rainfall in June is about 10 inches, in July about 22 inches, in August about 19 inches, in September about 7 inches and in October about 2 inches. The rainfall in October is not very common. This shows that in the ordinary years, July and August are rainy months with September as an after-rain month. Thus the rainy season is spread over four months. In 1899 June was the only rainy month and a regular drought in the other months.

4. The actual kharif harvest of 1899 was different with different sorts of cultivation. Rice was 40 per cent. in some, while it was *nil* in many. In many rice fields I had marked that the occupant did not undergo the trouble of cutting the crop for want of grain. It was given up for grazing. Kodra had the same fate as rice, but it was a little better than rice. Nágli was 75 per cent., but its cultivation is limited. Jowári in Chikhli varied from 25 to 60 per cent. Sugarcane was 75 per cent.

5. 50 per cent. of the population depend upon agriculture and 30 per cent. upon labour. The line of distinction between them is not very marked. There are several small khátedárs who cultivate two

or three acres of land in the rainy season and live upon labour in other months when their stock is exhausted.

Preliminary action.

6. The necessity of relief was considered imperious from the month of October from the failure of the crop, but the relief works were not actually opened without compliance with tests.

7. Till the month of November and middle of December the labouring class found some work in grass cutting and sugarcane pressing, but by the middle of December there was no field work for them while the price of grain rose by leaps and bounds. By the end of December it was found that several male adults had left the villages in search of labour leaving the families to shift for themselves. It was therefore considered necessary to find some work for the purely labouring class in the first instance. The Ambach Tank work in Párdi Táluka, Fanaswada Tank work in Bulsár Táluka and Samroli and Chikhli Tank works in Chikhli Táluka were opened as test works.

8. The Fanaswada and Samroli test works were given in the charge of the Public Works Department, while the Ambach test works was kept under my personal supervision. Within three days the number of people on the Ambach test work reached to four figures, and every day there was an influx of a hundred more. The work was given on piece-work system. The calculations for the work were made on the wages of two annas for a male adult, one anna and a half for a female adult and one anna for a working child above 12 years. That was the lowest rate of wages upon which they could live. The excavation was given at the rate of 4 annas per 100 cubic feet though the distance to which earth was removed exceeded 200 feet. When the earth was to be removed on high embankments the rate was increased to five annas. The work exacted from the labourers was so heavy that had there been the least chance of getting any other work the labourers would have left the test work immediately. To earn the full wages they had to work with energy from 8 A.M. to 5 P.M. incessantly. They took their meals on the work itself individually without stopping the work of the gang. This showed clearly that there was want of work for the labourers. The workers came from surrounding villages. Some of them had come from a distance of more than six miles, and they lived at night under the shade of trees on the work itself. Those who did not stop near the work joined it from home early in the morning with bread and a pot of water from home. One great incentive for the labourers to flock to the work was the daily individual payments for the work done for the day. The number in a few days rose to two thousand and there was no room to employ a larger number in the tank and the amount sanctioned was exhausted. So a regular relief work under the Public Works Department was considered a necessity.

The relief measures undertaken were the tank excavations, one in each táluka.

9. Surat District was considered removed from the range of famine, and consequently as far as I know no relief measures were actually made out before actual failure of the monsoon.

9. (*a*) Subsequently when it was conclusively established that relief works were necessary, lists of relief works were made, surveys and estimates made by the Public Works Department and even Government sanction obtained to open them one by one.

9. (*b*) I am not in a position to answer this question as the necessary programmes were prepared by the Public Works Department at the desire of the Collector.

10. The relief programme contemplated large public works as the backbone of the relief system. Lists of irrigation village tanks were prepared and programmes of their being taken up if sanctioned were ready, but such tanks were not found large enough to enable a large number of workers to work in them and so large public works were adopted.

11. (*a*) Test works preceded everything and were first opened.

(*b*) There were no poor-houses opened, but the incapables were kept and fed in the kitchens opened on the work. Those who were sickly were treated in the dispensaries on the works and others relieved by doles at their own villages.

(*c*) Kitchens were opened for dependants of the relief workers on all the works about three weeks after the opening of the works. From June, after the close of the relief works, 18 kitchens were opened in the Division, where cooked food was distributed instead of dry grain as doles.

(*d*) Subscriptions were raised at Párdi, where a small sum of Rs. 300 was raised. In Bulsár a sum of Rs. 1,300 was raised. These amounts were used in giving grain to the poor, irrespective of their belonging to the cultivating class or otherwise. In Párdi Táluka at three places cooked food was distributed to the poor, one at Koparli, one at Vapi and one at Párdi. At Koparli it ceased when the dole system was introduced. The local subscription there was largely supplemented by funds sent by a few charitably inclined Pársis from Bombay. At Vapi and Párdi the funds were locally subscribed and supplemented by the Mahájans.

At Bulsár Town cooked food was given from the funds locally subscribed.

The one drawback to this form of charity was its catholicity. Any man whether able to do work or invalid and young or old was welcome to it. In the morning certain quantity of rice was boiled and *pej* made. It was distributed to all comers, not being restricted to the invalids or incapables, the share which each received was very inadequate. It was too small to keep the recipients in sufficient bodily

strength and its distribution kept the able-bodied from the works, who supplemented the cooked food they obtained there by begging in streets.

(*e*) There have not been any Government forests of any extensive area. The forests areas, small as they are, were opened to free grazing for the cattle of the village in whose limit the area was situated.

12. A Panch, consisting of three or four respectable persons at each village, was appointed to arrange for village relief by the end of January. It was in the presence (*a*) of any two of them that the dole recipients were given by the village grain-dealer or, in his absence, by the Patel. No bills were passed by the Táluka Treasury Officer unless they contained a certificate signed by two of the Panch members that the grain was distributed in their presence. The dole registers were in the first instance prepared by the Mámlatdár. The persons were put on the dole registers or were struck off by the general duty Kárkun, Circle Inspector, the Mámlatdár, the Divisional Officer and by the Collector himself. The services of the Táluka Abkâri Inspectors and Sub-Inspectors and those of the Chief Constables were utilized for this purpose. This commenced from February, but the village relief came into full swing from the end of April.

(*b*) Mámlatdárs and Divisional Officers stimulated the local employment of labour by persuading the richer class to find means of employing labourers in their fields in improving their land. These attempts were not very successful as the people were in want of cash to be able to employ outside labour. They were, however, persuaded to apply for Takávi, and those who were solvent and able to give security were given Takávi promptly and thus some local labour was provided.

(*c*) Local charity in villages was quite out of question. In head-quarter towns the meeting of the people was called by the Divisional Officer and the hat sent round, and some of the people did respond to the call.

(*d*) The same officers, who had the authority to enter the people on the dole register, were also appointed to observe the general condition of the people. The Mámlatdár had to make a note of it and report it to the Collector every week. The village officers and the Panch members were asked to bring the cases to the notice of the Inspecting officers or to report to the Táluka Mámlatdár in urgent cases.

13. From the very beginning of November loans under the Agriculturists' Loans Acts were given. At first the people were shy of them, but gradually when they saw that prompt inquiries and prompt payments were made they did apply for them. From November 1899 to June 1900 Rs. 62,276 were disbursed as Takávi under Act 19 of 1883 and Rs. 36,993 were disbursed under Act 12 of 1884. The total amount disbursed at the end of June thus amounted to Rs. 1,09,279. In the month of July and in the subsequent months Rs. 57,333 were disbursed for

the purchase of seed and Rs. 9,283 as subsistence money. The Takávi advances were made to the people of all classes who applied for them and whose land was found unincumbered and fit to be taken as security. The only condition of the payment was the solvency of the recipient who was bound to satisfy the revenue officers that the work stipulated to be done with the money advanced, was done at the end of the stipulated period. The loans given under Act 19 of 1883 were for sinking new wells, repairing and deepening old wells and for improving land by excavation and repairing the banks of rice fields. The loans given under Act 12 of 1884 were for the purchase of bullocks and for the purchase of seed.

Two hundred and fourteen is the number of wells sunk as well as repaired from the advances of Rs. 49,915. The number of new wells sunk and the amount of Takávi for them, and the number of old wells repaired and the amount given for that work cannot be determined owing to the short time at my disposal for answering these questions.

The Takávi advances were recoverable in whole with interest, while those for seed and subsistence were recoverable without interest.

14. Irrigation wells can be made in the Division, though in many cases the wells are required to be sunk deep to tap a good supply of water. The lower strata of soil is very often stony and stones are required to be blasted. The average depth of water was not determined by an actual measurement, but on the cessation of rains it was on an average of 20 to 25 feet, but in many instances in April and May I have seen the water surface sunk to a depth of 15 to 20 feet below the average depth. Sinking of wells were encouraged by loans as a permanent improvement. No wells were sunk to secure the crop on the ground or as a temporary measure to employ labour. 83 acres were brought into cultivation and irrigated by the wells sunk and repaired from the Takávi loans. When the wells were completed the season of raising an irrigated crop had passed away and so very little use for irrigation was made in the year of drought.

15. The answer to this question is included in answer to question 8. The test works were undertaken at the cost of the Táluka Local Boards.

16. The answer is included in that to 2—8.

The task given was done by groups consisting of males as well as females and children. Generally the groups were formed by labourers themselves to whom the work was assigned to cover the cost of wages of the whole gang. On the test works the persons that came to work belonged to the labouring class.

17. Payments were made in strict proportion to results.

There was the minimum wage alone and no minimum wage or a rest-day allowance or an allowance to dependants on test works.

18. The test work themselves were not converted into regular relief works, but the latter were opened at quite different places under the supervision of the Public Works Department. The reasons on which the regular relief works were considered necessary have been given in answer to question 8.

Large Public Works.

19. In the middle of January 1900 it was decided to open regular relief works. The first was at Párdi (Párdi Táluka), opened on the 18th January. After seven days one was opened at Ohond, Chikhli Táluka, and after 10 days more at Palan, Táluka Bulsár. They were large public works.

20. These works were under the control of the Public Works Department. The other part of the question can be best answered by the Public Works Department. As far as I know no unnecessary delay was caused in opening them. The Collector fixed the day about a week previously and they were opened on the appointed day, but it took a few days to bring the works under a systematic order.

21. This question can be best answered by an officer of the Public Works Department.

22. A few days after the opening of the works, huttings were prepared by the Public Works Department, and when the arrangements were completed and the work brought into a systematic order, compulsory residence was enforced and kitchens were opened (12th March). All conservancy and sanitary arrangements were made and perfected before that date. Food-supply arrangements were made from the first day of the opening of the work. The medical officer and his store arrived a few days after.

23. The admission to the work was free to all comers who submitted to the labour test till 12th March, from which date compulsory residence was added to the test.

24. A large public works charge of 5,000 persons can serve the villages of only 5 miles radius in acute famine. In the last year's famine no statistics have been made as to the distance of homes of the relief workers. From long distances the workers were few.

25. As far as I am aware the officers of the Public Works Department were subordinate to the Collector in all matters. The table of prescribed task was prepared and supplied to them by Government.

26. There was a Special Civil Officer for each work. He was appointed from the staff of the Revenue Department. Each received Rs. 40 per month. Each of them had the third class magisterial powers. He had a position subordinate to the local representative of the Public Works Department, who was for some time an Assistant Engineer and for the rest of the time was the Sub-Assistant Engineer who had the three works in his

charge. A Sub-Overseer remained permanently on the work. The Civil Officer and the Sub-Overseer worked in different spheres and one was not the subordinate of the other.

The Civil Officer in charge had full authority to assure himself that the measurements were correctly made, and he very often presented himself at the time of payments.

27. The work was done by the Public Works Department and not by the Civil Officer.

28. The Civil Officer classified the new-comers and sent them to the Overseer. The gangs of labourers were framed by the Sub-Overseer in charge of the work. The number of labourers constituting the gang depended upon the Assistant Engineer in charge of the work. Arrangements were made generally to form gangs of the same village people, but when the same village people were too small in number to form a full gang, labourers of another village were put with them to make up the requisite number to form a gang.

29. Classification of labourers was formed and the wage scale adopted according to the Famine Code.

30. There was a distinction of wages of men and women not entirely according to the sex, but according to the capability of the workers. Men, if not able to dig, were put in Class II and employed to carry earth. Women were rarely put in Class I.

31. When the works were opened the work was done on piece-work system with 33 per cent. added to the task prescribed by the Code to enable the workers to earn for their dependants. From the day the kitchen was opened on the work for the dependants the Code task system was adopted with compulsory residence. The two systems of work were not simultaneously carried out on one work or on different works in the same Division.

32. I do not think a system of payment by results is entirely unsuited even in acute distress. With certain modifications it can be carried out the whole season. Only the rate of excavation should be graduated for separate gangs, consisting of persons of different stamina and physical capability, *i.e.*, by favourable rates in proportion to the physical condition of the workers.

33. It should be answered by an officer of the Public Works Department.

34. The scale of wages was just sufficient to live upon. There is no evidence that the workers saved upon their earnings unless they stinted themselves to find something to send for their children at their homes. Copper coins did return freely to the Banias on the works. No scarcity of copper coins or small silver coins was ever experienced on the works.

35. A rest-day wage was given separately, but it was given by adding $\frac{1}{6}$ of the minimum wage to

the daily wages earned. This rest-day wage was given gratis without the workers earning it. I think that the people can earn it with the Code task work, even if the rest-day wage is given gratis without compelling the relief worker to earn it. I think it is not politic to add the $\frac{1}{6}$ of the wage to the daily wages. This system does not give an idea to the worker that the rest-day wage is given to him as a favour by Government without taking work in return. He is left under an impression that his daily wage is what is put down in the muster roll and given to him and the Government stops the work and gives him rest one day in a week at his own expense. I think it should be separately shown in a way that he can learn that he takes rest once a week at the State expense.

38. Weekly payments were made, but subsequently bi-weekly payments were made.

39. For the first ten days daily payments were made and then bi-weekly for the subsequent ten days and then they were paid along with old workers. Even with bi-weekly payments the labourer was thrown into the debt of the Bania till the next payment day. The Bania did not trust him grain until he was assured of the stability of the worker and he assured himself after consulting the Overseer that the man had earned for the day the grain he wanted on credit.

40. As long as the piece-work system was in vogue payment was made to the headman of the gang. When the task system was introduced payment was made to individuals. I prefer the latter to the former even on the piece-work system. Several instances were found in which the headman on some excuse or other had failed to pay the wages to the individuals of his gang. Immediately that the complaint came to the ears of the Civil Officer or the officers of the Public Works Department inquiries were made and the cause of complaint, if true, was removed.

43. The maximum wage was the one directed and regulated by the direction of the Famine Code. The children were fed in the kitchen. Weakly persons capable of some work were given light work with a minimum wage. I think piece-work at favourable rates is preferable.

44. No contractors were employed except for the supply of materials required on the work.

45. No muster rolls were kept when the payment was made on result system. The latter part of the question can best be answered by an officer of the Public Works Department.

46. The price scale for the calculation of wages was fixed weekly by the Collector. The price rates of the táluka were inquired into and determined by the Mámlatdár and submitted to the Collector by him. It was based on the price of Rangoon rice. Small variations in prices were neglected.

47. The answer to this question has been given above in answer to other questions. It can, however, be best answered by the officer of the Public Works Department.

51. No people were ever drafted from large public to small village works.

Small Village Works.

52. Small village works did not play a regular part in the scheme of general relief. They were used as small subsidiary relief works when the public relief works were approaching closure.

53. Only at the end of the season when there was epidemic of cholera on all the three works and the labourers fled in terror that small village tank works were opened by the Táluka Local Boards. Two such works, *viz.*, of village tank excavations with two petty road repair works were opened in Párdi, five such tank excavation works were opened in Bulsár Táluka and two in Chikhli Táluka.

54. These works were conducted under the supervision of the Civil agency by direct management.

55. The work was every day given, inspected when done, measured and records kept by the Civil agency, consisting of the Local Fund Overseer and one Kárkun of the Mámlatdár's establishment under the supervision of the Mámlatdár himself, who visited the work every third or fourth day but the labourers were paid daily through the private agency. A Bania of the village lent the money for daily payments as the work was measured and certified by the Overseer. The payments were made daily by the Local Fund Overseer in the presence of the Pátil and two respectable persons of the village. On the visit of the Mámlatdár the work done in his absence was again measured and bills prepared and submitted for payment from the Local Funds, and the Bania was paid the money lent by him. Except this no private agency was forthcoming in help of the Civil agency.

56. No attempt was made to work the Code task work. The task was, however, heavier than that given by the Code. The scale of wages adopted was Re. 0-1-9 for a male adult, Re. 0-1-3 for a female adult and Re. 0-0-9 for a working child. The excavation was calculated at these wages. Excavation was calculated in the beginning at first at 4 annas per 100 cubic feet while within 200 feet from the embankment and Re. 0-4-6 if beyond it. In no case the distance was more than 300 feet.

Employment was given to all comers. They were formed into convenient groups of 10 or 15 workers and plots measured out for them to excavate before the evening.

57. No system of selection of applicants was ever tried.

58. No large public and small village works ver existed close one another.

59. My opinion is in favour of small village relief works in preference to large public works or

at least as subsidiary to them. They are preferable from the following points :—1 economy, 2 utility, 3 remunerativeness, 4 ultimate gain to Government, 5 sanitary point, 6 suitableness to the workers. In the first instance they are worked more economically than the large public work. In the second instance they are far more remunerative than the latter unless the latter works belonged to the irrigational class, such as constructing a canal or a water work. In my humble opinion an excavation on one tank costing about a lákh or two of rupees is not so good in the utilitarian point of view as the same sum if distributed over 15 or 20 village irrigational tanks. No fresh land is irrigated in proportion to the amount spent. The land under irrigation by the tank can be benefited as well by a few thousands as by a lákh of rupees. If on the contrary sums amounting from Rs. 1,000 to Rs. 10,000 in proportion to the area of the tank and the land irrigated thereby are spent on a number of village tanks for excavation the land depending for water upon them can be highly benefited and the cultivators' loss of one year from drought can be recouped very easily even at the very next year. To the landholders of the land irrigated by these improved tanks the famine may turn out a blessed evil. I have found that the cultivators of land irrigated by the tanks excavated by the Local Boards at the end of the season are blessing the drought which made the tanks excavated and gave a supply of water to their rice fields which formerly they had not though they paid the special water rates. In every táluka the tanks have silted and the cultivators have not been able to procure sufficient water at least at the latter part of the year even in ordinary years. Consequently in a famine year it is very desirable to excavate these irrigational tanks. Their excavation ultimately will save Government expenditure from the irrigational funds. Every year a few tanks are taken on hand by that department, and if they are excavated in a famine year, the Government would save subsequent expenditure on this land for at least 15 years to come.

It is also not very desirable to congregate a large mass of people at one place. There is always a difficulty of procuring potable water sufficient for all. The ignorant and illiterate labourers very often decline to drink the water supplied by the Public Works Department, especially in their huts. They always try to clandestinely supply themselves with water, however unpotable.

The congregation of a large number of workers produces cholera or other infectious diseases notwithstanding all the care and sanitary arrangements of the officers in charge of the works.

Then again comes the difficulty of persuading these people to leave their homes and permanently stay in quarters supplied by Government. They generally misconstrue the benign and parental care which Government take in saving them and protecting them from the inclements of weather and from the effects of foul water. They prefer death

by starvation at their own home and amidst their families, to going to large works with compulsory residence and compulsory use of water given to them. They consider it as loss of freedom and a sort of hard labour imprisonment.

On small village works the conditions are all changed. The labourer is near his home. He goes to work early in the morning even if the work is at a distance of five miles from his home and returns to it at night. On my test work I have found labourers coming on the work at 7-30 A.M. from their houses at a distance of five miles. They prefer all these inconveniences to a compulsory residence on the work and separation from family. To prevent a person not in need of relief from resorting to the small relief work owing to its nearness to his home the task work should be increased. Instead of exacting the 75 per cent. of the ordinary labourer's work the full task or task to its stretching limit should be exacted to try his patience and his working capacity. The people of this part are so addicted to sloth that they would never stand the test and would prefer going to bed on half empty stomach, to a hard labour to earn for a full stomach. The difficulty on this side is more in persuading those in need to go to the work than in dissuading those not in need from going to it.

Special Relief.

60. There are no aboriginal tribes except the Kaliparaj. They exist in all the three tálukas of this Division. They originally belonged to the aboriginal class, but by lapse of time they have improved a little and are not so averse to leave their houses as people of the true aboriginal tribes. Some of them did go to the relief works if in the vicinity, but others refused to go to a distance. I have found several instances in my personal experience in which they have refused to go to the kitchen even, where food was provided without work to those who were not able to do work, and I was forced to give them relief in their own villages by entering their names on the dole register when they were actually starving, to save them from death.

61. No forest and fodder works were opened.

62. No able-bodied persons were engaged on works of private utility at public expense.

But some of the dole recipients, who were not altogether unable to work, were made to do odd jobs of public utility, such as filling up rutts on roads and improving village approaches.

63. No.

66. No cattle had died of actual starvation and want of fodder. Several of them died from ordinary cattle diseases, which to a weak state of body proved fatal in some cases, but the number was not very great.

67. There were no tracts actually suffering from scarcity of fodder. The cattle suffered a little a the last stage of the season when the stock was exhausted and the rains held off till the end of June,

Several cultivators had to feed their cattle with leaves for a few days in June.

Gratuitous Relief.

68. Dependants were relieved on large public works in kitchens with cooked food.

69. Gratuitous relief was given in dry grain at the villages. That was the only mode of relief that could be given without entertaining an extra establishment and incurring other expenses. Centre kitchens could not be opened without extra establishments and extra expenses in the purchase of cooking pots and water pots, fuel and other things and in erecting suitable sheds to cook in and feed in. At the same time cash could not be given, as that mode of relief was likely to erect fraud, and there was no surety that the cash money paid was going to be used in feeding the recipients.

70. Requires no answer as no cooked food was given in doles in the beginning.

71. No poor-houses were ever opened. Only the kitchens on the work served as partial poor-houses. The number in them was not very large.

72. *Nil.*

73. *Nil.*

74. Before the rains broke there were only three kitchens in the Division. After the rains 8 kitchens in Párdi, 6 in Chikhli and 7 in Bulsár were opened. When opened they were intended to serve the villages within 4 miles, but practically they could not serve beyond the villages themselves, where they were opened. There have been so many creeks and rivulets coming between the villages that the recipients who were for the most part old and infirm and children, dependants to cultivators, that they could not easily reach the kitchen in a neighbouring village.

75. The ration was provided as directed by the Famine Relief Code. Meals were distributed twice a day at fixed times. Cooked rice, dál and vegetables were given in the morning, bread and dál in the evening. The people were compelled to feed on the premises and were not allowed to take the food away. In the kitchens opened after the rains at different villages, the recipients were compelled to feed on the premises on dry days, but were allowed to take food home if it rained at the time of distribution of the food, as no adequate shelter was provided for them while feeding.

76. No separate civil kitchens were ever opened while the relief works were in progress.

77. The admission to kitchen on the works was open to the dependants of the relief workers only. Other invalids and incapables were entered, who were absolutely unable to work or too poor to maintain themselves otherwise. The dependants of relief workers were entered to the kitchen on the certificate of the Public Works subordinate on the work that they were dependants on a relief worker. Incapables and invalids were entered in the poor-house, part of

the kitchen, when they brought a certificate of the Patel of the Táluka Kárkún that there was none to support them. In the kitchens opened after the rains, those whose names were on the dole register were alone fed.

74-2. The ration was the same as that given in the kitchen. In cases of sickness and weakness it was varied on the suggestions of the medical officer; even milk and Mellin's food were given.

75-2. The village gratuitous relief lists were drawn in the first instance by the Mámlatdár. They were checked, revised, additions and omissions made from time to time by all the inspecting officers mentioned in answer to question No. 12. The recipients were also inspected by the inspecting officers on their visits of the village. No prescribed period was fixed for these inspections, but so constant were the movements of the officers that hardly a week passed without an inspection in villages where the number of dole recipients was large, *i. e.* the Kaliparaj villages.

76-2. Payments were made in grain daily. These recipients, who were unable to move and leave home, sent their relatives for receiving their doles. The inspecting officers satisfied themselves as to their inability to move out and satisfied themselves at intervals that they were alive.

77-2. None.

78. Cooks generally belonged to the Bráhmin class and sometimes to the Koli class, the person fed generally belonged to the Dhodia and Náika, Dubla and Koli class. Some Koli recipients refused to take cooked food, though cooked by their own caste people. This was in the early stage of the kitchens.

79. The kitchens on the works were worked by a special establishment under the Civil Officer. They were generally the schoolmasters. The Civil Officer was held responsible for all accounts and for the proper management and supervision of the kitchen. Additional supervision and check was exercised by the Divisional Officer and the Collector by frequent surprise visits.

The village kitchens were under the charge of the village officers and were supervised and checked by the Mámlatdár and his Circle Inspectors.

80. No cheap grain shops were opened in the Division.

81. *Nil.*

Suspension and Remissions of Land Revenue.

82. The amount of suspension of Government revenue was Rs. 27,740. No amount was totally remitted except the increase of assessment in Chikhli Táluka for the revised survey assessment introduced in the year.

83. The suspensions were based on the crop-failure combined with the general capacity of the individual to pay. The general capacity to pay was determined by the táluka officers, *i. e.* the Mámlat-

dárs, from the general condition, the way of living of the individual occupant, his credit and position in the village.

84. The amount of suspension was estimated by the middle of December before the collection of land revenue commenced, but the individual amount of suspensions was determined after instalment days.

85. No information available.

86. No such facts were observed.

General.

87. Only in a few Kaliparaj villages of Párdi and Chikhli Tálukas the persons in receipt of gratuitous relief exceeded 15 per cent. That was in the months of June and July. In such villages, except half a dozen of houses of the Ujliparaj, the population consisted of the Kaliparaj, who depended upon labour alone and cultivation. Even in ordinary years they lived from hand to mouth and had to be entered on the dole register, especially the children and dependants, to save them from utter starvation.

88. Neither excessive nor defective. But it had demoralized the people. Some, who would have not been entitled to gratuitous relief had they gone to relief work in time owing to its distance from their home, were entered in the register of gratuitous relief when they got emaciated by not going to the work and not working to earn their own livelihood.

89. The gratuitous relief recipients ordinarily belonged to the Kaliparaj with a few sprinkling of the better sort, such as the barbers, shoe-makers and Kolis. There were a few land-holders and a few occupancy tenants. The number of the latter was very limited and consisted of the incapables to the most part.

90. I have no experience of past famines.

91. There was a contraction of private credit. Those who actually joined the State relief had no resources of their own to exhaust. When the little that they had had exhausted, they joined the relief works or were given gratuitous relief when found in a semi-starvation condition.

92. The tests of the Code are more than sufficient to prevent persons not in need of relief from seeking it.

93. Answer not required.

94. The births and deaths are registered by the Pátil of the village. He divides his village into parts for collecting the information. If the population is confined to one village site and if the village is not very large the Pátil himself can very easily obtain the information. If on the contrary the village is divided into hamlets (*falias*) he deputes a Dhed (an inferior village servant) to one or more hamlets. He takes a round either every day or on alternate days and procures the necessary information which he gives to the Pátil.

95. In some villages the rate of mortality in 1900 was nearly 100 per mille. The villages were

visited by cholera in several instances and by diarrhœa and by fever in the months of June and July. The fever had become more fatal than in ordinary years owing to the weak state of body and insufficient clothing.

96. Cholera is considered as a disease arising from impure water-supply. The water level in wells had sunk low and there was a fear of water scarcity, but the Táluka Local Boards deepened a good number of them and the water famine was avoided. In villages visited by cholera wells were disinfected by permanganate of potash at intervals of a fortnight. In many instances two disinfections were found sufficient and no more disinfections were made after the disappearance of cholera.

The wells used by the relief workers were disinfected every week irrespective of the presence of cholera.

97. A special staff of Bhangis were kept. Separate places were set apart and ditches dug for the relief workers to obey the call of nature and the places were kept clean by the Bhangis.

The kitchens on the works were also kept clean by the inmates who were able to do light work. Those who were fed in the kitchen were given out a separate plot of ground to commit nuisances. On the works as well as in the kitchens the water used was drawn and kept unpolluted by a separate staff who supplied water to drink to all comers. Water pots were kept at each hut, which was supplied with water by a special staff for the resident workers for the night when they were off their work. This water was for drinking purposes as well as for domestic and cooking purposes. The wells, the water of which was used for the relief workers and in the kitchens, were protected from pollution by bamboo mattings all round and over, and no one, except the special water drawers employed in supplying water, was allowed to approach them or to draw water from them. The water that was supplied to the workers was kept in casks from which it was drawn by corked pipes to prevent it being touched and polluted with hands.

The sanitary arrangements were sufficient. They were made and carried out by the Special Civil Officer helped by the Public Works Overseer. They were supervised by the Medical Officer in charge of the Relief Work Dispensary and often by the Assistant and Sub-Assistant Engineer in charge of the work and by the Divisional Officer.

98. On all the works grain shops were opened. They were inspected by the Special Civil Officer. Only in one instance rice of inferior and damaged sort was found put up for sale, and the sale was immediately stopped and the shop removed from the work.

99. The relief workers had no means to supplement their food with wild products.

100. There was some immigration from Native States, but the exact proportion or number cannot be determined for want of statistics and means of deter-

mining the exact residence of the relief workers. Even on the Ambach test work there were five Káthiáwari workers. At places where cooked charity food was given to all comers there were found several hailing from Dharampur and Daman States and even Káthiáwár. Bulsár Town was infected with beggars of this sort.

101. No special statistics have been kept to answer this question.

102. Some of them were sent to Surat Orphanage, and some were handed over to the relatives, even distant, who promised to take care of them.

103. No suggestion to make on the point.

104. This Division imported grain and exported fodder. I am not aware of any difficulty of obtaining waggons for grain at Bombay, at least I have heard no complaints of the sort, but there were frequent complaints of the paucity of railway trucks for exporting fodder. The selling price of grass varied with the facility or otherwise of obtaining waggon for exporting it. When the selling price varied at the exporting stations, I think the price at the importing stations must have correspondingly varied, but I have no definite information on the point.

104. (*a*) The information was supplied to the Collector direct.

105. No complaints were heard.

106. No change.

The field labourers are paid wages in grain in this Division. On all other works wages are paid in cash. Cash wages generally do not fall or rise in proportion to the rise of prices of food, but rise or fall in proportion to supply and demand and depend upon the time of season.

108. As far as my knowledge goes the directions of the Famine Code were not departed from.

109. No.

110. No non-official agency was ever found willing to work in famine time. This non-official agency was prominent in recommending persons for entering persons on the dole register. They never undertook to persuade the idlers to go to the relief work instead of starving themselves by remaining at the village and then becoming a burden to the State. They considered the duty of remaining present at the time of dole distribution at the village, a task to be avoided as much as possible. The non-official agency could not be trusted independently with the work of grain distribution or the charity fund money. There was an absolute absence of unselfish honest workers who would give their time and energy for charity's sake.

Unless the moral tone of the people improves there is no hope for a scope of its extension. It should be noted that my remarks above are confined to my experience of villages and small towns of my

Division alone and not to cities of which I have no experience as far as famine is concerned.

111. (*a*) There was no system employed other than those of task system and restricted piece-work system. I am, however, of opinion that the system of payments by result (unrestricted to the maximum amount earned) is sure to attract more men to the relief work than the system of task work. As long as the task work is not abnormally and unreasonably heavy the people would not care, provided they earned wages enough to live upon. The labourers would look shy of the relief work if they think that they cannot earn sufficient even to keep body and soul together with all their honest and diligent labour on the work. They would prefer complete starvation without labour to a partial starvation with full-day labour. In the same way the people would like to earn high wages with a reasonable increase of work to low wages with a slight decrease of work. To honest labourers money is dearer to physical work, provided the limit is not exceeded. In my humble opinion fines should not be inflicted for a slight and insignificant deficiency of work, which has not been the result of wilfulness or sloth. Some margin of consideration should be given. The fines should be inflicted in proportion to the shortness of work on a proportionate scale.

The tests of necessity, such as a distance test and compulsory residence, in my humble opinion, are far more deterring tests than task work test. The distance test and the compulsory residence test cannot be enforced on the same work. When the compulsory test was applied to the relief works in the Division, for nearly a fortnight the works were deserted and only one-tenth of the workers were found on the works. After the period when the people found themselves losing in flesh and strength they gave way and complied with the test but not before they had suffered in health to some extent. The compulsory residence test deters many from joining relief works, not because they do not require the relief, but because they prefer their homes with their families. This test is innocuous and makes no difference in the number of relief workers when the famine is far advanced, and when the people have totally lost their cattle and everything that they have. Then only they would roam about like the herdsmen of Káthiáwár and may perhaps join the work and reside on it. Even then they would not much like to live the restricted life of the work. But as long as the labourer has one or two cattle to look after, when he has trees of his fields to look after and his hut, he would not go to the relief work to reside there either alone or with his family. If he goes there alone he does not save anything to send to his family for their maintenance and he does not like to see them face starvation in his absence unless he has become callous to their sufferings. If he goes there with his family he has none left to look after his cattle and his trees. Thus this test restrains many in joining the relief works who are in real need of relief. At the time of famine it is one of the

objects of Government to see that the cattle of the cultivator is saved as much as possible. If it is saved he will be able to cultivate Government land and pay its assessment and raise crop to maintain himself and cease to be a burden to Government the next year. By the test of compulsory residence this object is frustrated. If the man wants to go to the work and reside there he has to sell off his cattle which goes for a song in the time of famine. When the rains commence he has no means of cultivating his land and the Government has to supply him with bullocks in making him start his cultivating life again, an additional burden to Government. This system is therefore in the end more expensive than the relief works without the distance or compulsory residence test. If on the contrary the person in real need of relief does not go to the work owing to the restrictions, no doubt the number of workers on the relief work is limited, and it causes savings on the work, but increases starvation or semi-starvation and weakness in the villages, and consequently a larger increase of State expenditure in the form of gratuitous relief and a higher rate of mortality.

112. I have no experience and personal knowledge on the subject.

SORABJI RATANJI MASTER,
District Deputy Collector,
Surat, Bulsár Division.

1141

Mr. Burjorji N. Vakil.

Answers by Mr. Burjorji N. Vakil to the questions drawn up by the Famine Commission.

Introductory.

1. The outlook in our district was ordinary. The character of the harvest in the two preceding years was fair.

3. The average rainfall is 33 inches. The actual rainfall in 1899 was 15·56 inches, and it represented 47 per cent. of the average. The rain ceased in the month of June. Its distribution from June to September, compared with the average, was as noted in the margin.

June ...	... 13·49
July ...	... 0·89
August ...	... 0·80
September	... 0·38

Compared with the average it was double in June, $\frac{1}{7}$ in July, $\frac{1}{7}$ in August and $\frac{1}{13}$ in September.

Gratuitous Relief.

80. In the month of October 1900, when the prices of grain went abnormally high and the prospects began to look very gloomy, the Collector, Mr. J. W. Weir, at the sugguestion of some of the leading citizens of Surat, started a fund for the opening and maintenance of a sufficient number of cheap grain shops in the city. Looking to the hard times then prevailing and the helpless condition of the poorer classes, handsome subscriptions poured in, and within a short period a large sum of Rs. 34,932 was collected. Over and above this sum some philanthropic gentlemen advanced by way of loan Rs. 52,000. Out of this aggregate sum a large stock of grain was purchased and four shops at different places were forthwith opened, which gave considerable relief to the people. The following is a brief history of working of the fund:—

(1) In the commencement 13,000 maunds of grain (rice and juvári) worth Rs. 25,000 were imported from Bombay and stored up at a convenient place in a spacious godown in the city. This had a wonderful effect upon speculators, who for some time past had managed to keep the rates fancifully high to serve their own private ends. The result was that the rates for wholesale as well as retail became steady and fluctuated only in proportion to the real market rate prevailing from time to time at Bombay. This enabled the Committee at a subsequent stage to make purchases in the city itself from *bonâ fide* traders.

(2) The fund was under the management and control of a working committee of 6 members selected from amongst the subscribers with the Collector at their head.

(3) The fund was started on the 3rd of October 1899, and within a short period of 10 days four different shops at convenient places in the city were opened, where grain to the extent of five seers per head per day was sold to all who came to buy it without any restriction of class or creed.

(4) In the beginning as the market rates were exhorbitantly raised by retail dealers, the Committee sold their grain at 3 pies less per seer, *i.e.* juvári at 8 pies and rice at 9 pies per seer. These rates were subsequently raised or lowered as was found to be expedient, but in no case they were kept higher than 9 pies per seer.

(5) The shops were in the beginning managed by a staff of servants employed on monthly wages, but the Committee finding that method of working more expensive gave the shops in charge of a contractor, who undertook to sell the grain supplied to him on all the four shops for a reasonable remuneration, *viz.*, Rs. 125 for the first month and at the rate of Rs. 100 per month for the rest of the period. This method of working made an immense saving in the expenditure for establishment. The contractor had to sell the grain at the rates prescribed by the Committee from time to time, and the sale proceeds which he realized was daily paid by him in the Bank of Bombay to the credit of the fund.

(6) With a view to give clean, wholesome food to the buyers, the stock that was bought was, as a rule, always first carried to the godown where it was thoroughly cleaned before sending it to the shops for sale. This process cost a great deal, because a lot of insects, bran and all other sorts of rubbish had to be taken out.

(7) During the whole period of 12½ months for which the shops were kept open 36,023 maunds of rice worth Rs. 64,823 and 41,047 maunds of juvár worth Rs. 73,681—in all 77,070 maunds of grain worth Rs. 1,38,503 were sold.

(8) In the working of these shops as above the fund sustained a total loss of Rs. 18,210, including all sorts of expenses, and the average loss, therefore, on the capital was about 13 to 14 per cent. This high rate of losses was chiefly due to the cleaning of the grain and extra cartage paid for sending it to the different shops.

(9) The balance (Rs. 16,722), which was found after winding up the concern, was distributed *pro rata* amongst the subscribers, that being one of the conditions made at the time when the fund was started.

(10) By the opening of these cheap grain shops, not only the poorer classes of the town as well as those of the surrounding villages (because they also came to buy at these shops) got clean, wholesome food at moderate rates, but it had an indirect effect of altogether putting a stop to speculative prices, and thus the general public at large was greatly benefited.

(11) A copy of the Committee's report and the accounts passed in a meeting of the subscribers are herewith appended for any further detailed information that may be required.

81. The opening of these shops did not in any way discourage the importation of grain. It only affected the general prices in a way far more beneficial to the general public; because before the opening of the shops the retail dealers often charged exorbitant rates which they could not do afterwards.

Under the above head I take the liberty of giving a short account of other grauitous relief given in the district:—

(1) Some stock of grain and money were sent by different people to the Collector, which were distributed amongst respectable but needy families of the town and the district through private agency.

(2) In Vesu, a village in the Chorási Táluka, grain was distributed twice at the expense of some Bombay Pársi gentlemen amongst the needy Pársi families of that place.

(3) The Pársi Panchâyet of Surat in ordinary times give monthly allowances by way of help to destitute Pársis in the city and the district. But from March to October 1900 the allowances of some of them, who were found to be most needy, were increased by one rupee per head per month. These extra allowances in the aggregate amounted to about Rs. 858.

(4) In the year 1900 a fund was started by the Pársi Panchâyet of Bombay for the relief of their co-religionists suffering from famine in Gujarát. Out of this fund a sum of Rs. 2,200 was sent to me by the Secretary of the Panchâyet, with a request to give help to the most destitute Pársi families in shape of grain and cash (for seed), firstly, in the Olpád Chorási, Bárdoli and Jalálpor tálukas, and subsequently in the Mándvi Táluka. To this sum a further sum of Rs. 2,300 was added by the Pársi Panchâyet of Surat (from the funds in their charge), and out of this total sum of Rs. 4,500, help was given in shape of grain and cash (for seed) to 288 destitute families consisting of 1,125 souls. Help was given to some in shape of cloth also. The following details in connection with this distribution may prove useful:—

(*a*) Different parties were sent at different tálukas to make personal inquiries and to ascertain the number of families that were destitute and most needy.

(*b*) No help was given to any except to those whose fitness was certified by these inquiring parties.

(*c*) Some portion of the grain was sent to different tálukas to a central and convenient place and some was distributed in the city itself to the inhabitants of some of the villages who could conveniently come there.

(*d*) Grain at an average of 2½ maunds per head for adults and 1¼ maund per head for children was given by two instalments.

(*e*) The help that was given in cash was at the rate of Rs. 0-5-0 per bigha, and in the aggregate it came to Rs. 360.

(5) Similar help was also given in the remaining tálukas of this district through other private agencies.

(6) A philanthropic European lady, Mrs. Weir (the wife of our present Collector), raised a large sum of about Rs. 25,000 to 27,000 by holding a fancy fair, which sum was handed over to the Famine Relief Fund Committee to help the most needy and destitute families of the tálukas that were most affected by famine.

BURJORJI N. VAKIL.

14*th January* 1901.

1445.

Ra'o Baha'dur N. C. Soman.

Replies by Ráo Bahádur N. C. Soman, District Deputy Collector, Belgaum, to the questions drawn up by the Famine Commission.

Introductory.

1. The rainfall in May and June never exceeded 55 cents. at a time. Nevertheless more than three-fourths of the kharif area was sown. There was practically a break from 19th June to 7th September, and the kharif crops sown withered away.

In the two preceding years the harvests were moderate, the outturn of the principal crops being as shown below against the normal, represented by 12 annas.

	Jowári. As.	Bájri. As.	Wheat. As.	Gram. As.	Cotton. As.
1897-98...	6	7	8	10	6
1898-99...	8	7	8	10	6

2. The kharif sowings were 81 per cent. of the normal. The normal kharif area has been arrived at by finding the average of the three years, preceding the famine of 1896-97, *viz.* 1893-94 to 1895-96.

3. The normal comes to 150,739 acres.

(*a*) Average rainfall during the rainy season is 23·20.

(*b*) Actual rainfall during the rainy season of 1899 15·78 inches, being 68 per cent. of the average. 11·78 inches fell between 8th and 21st September.

(*c*) The rains practically ceased on 21st September.

(*d*) The distribution of the rainfall was as shown below :—

	1899.	Average.
June'	1·70	4·21
July	0·30	2·80
August	0·26	2·95
September	12·22	4·42

4. The actual kharif harvest of 1899 was about 8 per cent. of a normal harvest on a normal cultivated area.

5. Petty cultivators about 45 per cent.

Labourers 16 per cent.

Preliminary action.

6. Tests were applied.

7. Both myself and the Collector visited the affected parts, and we were regularly besieged by numbers of persons in every village applying for employment. Several emigrated and the general appearance of the labourers and small cultivators showed that they were hard pressed. The condition

of the destitute poor seemed to be deteriorating. Cattle were sold for very low prices. The rates of interest on land mortgages rose tremendously. The subjoined table classifies the rate charged in the case of 128 deeds registered by the Sub-Registrar of Athni between 6th November and 6th December 1899 :—

Rate of interest.	Number of cases.	Rate of interest.	Number of cases.
9 per cent.	1	20⅝ per cent.	1
10½ „	1	21 „	2
12 „	11	24 „	18
13½ „	3	25 „	1
15 „	5	27 „	3
16 „	1	28⅓ „	6
18 „	12	30 „	2
18¾ „	9	35¾ „	1
		37½ „	7

Prices of the staple foods rose nearly three times, jowári being sold at only 17 lbs. in November.

8. The first relief measures undertaken were the grant of tagái to large land-holders who provided employment to the thousands of needy at or near their own homes and the opening of two test works on 1st and 5th December under Public Works agency. The only test applied was the exaction of the task.

9. (*a*) Yes. So far as I know.

(*b*) I have no knowledge. I understand that a list of candidates had been kept in the Executive Engineer's office.

10. The relief programme contemplated large relief works as the backbone of the relief system. A programme of small works was ready.

11. The sequence was as follows:—

1. Test works.
2. Kitchens on works.
3. Private charity.

There was no necessity to open poor-houses or kitchens elsewhere. There are no forests in Athni Táluka.

12. The 83 inhabited villages in the Athni Táluka were divided into five circles and each circle was placed under an Inspector. A relief Aval-Kárkún was appointed to supervise their work. The Táluka Mámlatdár and myself also supervised. These arrangements came into force from 11th March 1900. Before that the work was performed by 3 Circle Inspectors and was supervised by the Mámlatdár and myself.

13. The issue of loans under the Land Improvement Act commenced in November. The subjoined table exhibits the extent, &c., of the loans.

Land Improvement Loans Act, XIX of 1883.

	Rs.
Sinking of new wells	31,611
Repairs to old wells	26,990
Construction of embakments	45,177
Extirpation of weeds	25,157
Removal of prickly pear, shrubs, stones, &c.	1,275
Total ...	1,30,210

	Rs.
Purchase of seed	14,255
Purchase of bullocks	8,338

The conditions imposed were :—

(*a*) The work should be commenced immediately unless special permission was granted to the contrary.

(*b*) It should be finished before the monsoon.

(*c*) It should be open to inspection by any officer of Government.

(*d*) Breach of conditions will entail immediate recovery of the whole amount.

In the case of loans issued at the outset two additional conditions were imposed, *viz.* (1) the work should be finished in 3 months and (2) 25 labourers should be employed daily for a period of 1 month for every Rs. 100 borrowed or in the same proportion for a larger or smaller amount.

The loans issued in the beginning were granted to large land-holders. Later on, they were issued to land-holders without distinction.

All the loans were recoverable in whole.

14. Yes. The average depth was about 3 to 4 feet. The October rain (Hasta) which principally contributes to the water-supply not having fallen, the wells were low notwithstanding the copious fall in September. The number of new wells was 276 sunk and old ones deepened. They were successful in all the three ways mentioned. The uncertainty of discovering water under rock bed acts as a damper. If boring apparatus or similar appliance is supplied by Government the sinking of new and the excavation of old wells will receive a great impetus.

15. Two road repair works were first undertaken. They were ordinary Local Board works, carried on under the Public Works agency.

16. I have not got notes, but I believe the tasks were the same as those exacted in the famine of 1897. They were different for sex and age. No consideration was shown for previous occupation.

17. The payment was in strict proportion to results.

There was a maximum but not a minimum wage. The rates were so arranged as to include provision for rest day and dependants.

18. The numbers on the two test works went up to 2,601 in December when the conversion was sanctioned. The works were carried out on the task system, without allowance for dependants or rest day. They had to excavate in hard and soft murum. Notwithstanding the hard conditions so many workers came and from long distances. It was therefore considered that there was a real demand for employment.

Large public works.

19. A large road work.

20. Public Works agency. I have no knowledge whether the scale was ready in advance. The estimate was ready.

There was no delay in opening the work and tools and plant were at once available.

21. There was only one charge for a maximum number of 4,000 workers. The number on the work never exceeded 1,500.

22. Yes. The establishment was as follows :—

1 Supervisor.
2 Sub-Overseers.
1 Maistri.
1 Cashier.
9 Mustering kárkúns.

A camp had been erected before hand and bamboos and matting were kept ready. The workers were scattered along the roadside and no special conservancy or sanitation establishment was entertained. The Special Civil Officer in his daily rounds looked to them. The water-supply was drawn from wells in gardens by the roadside or from temporary wells sunk in nálas and they were protected by posting watchmen where necessary. The water was carried on carts and supplied to the workers.

A few shops for food supplies were established on the work at first, but as the workers purchased at the nearest weekly markets at Athni, Shedbal and Kágvád, and in the neighbouring villages, the shopkeepers left for want of custom.

A Hospital Assistant was appointed.

23. Admission was free to all. The distance test was not insisted on and the work being of a struggling nature it was difficult to enforce invariably residence on the work. As a rule they resided on the work.

24. A large work capable of entertaining two charges of 5,000 each may serve an area lying within a radius of 12 miles and a population of 150,000. Some of the applicants for relief went a distance of about 20 miles from home.

25. Yes, except professional.

26. Yes. He was kárkún in the Mámlatdár's office on Rs. 30. He drew Rs. 40 per month as Special Civil Officer and a horse allowance of Rs. 15. He was subordinate to the Public Works Department.

The Special Civil Officer had full authority in the matters mentioned except that the calculation of wages and submission of accounts and reports, excluding those of kitchen, rested with the Supervisor. When the worker questioned the correctness, the Special Civil Officer satisfied himself by examining the measurement and calculation books.

27. When the Special Civil Officer objected, the matter was referred by the Supervisor in charge to the Executive Engineer whose decision was acted upon.

28. As far as possible members of the same family and inhabitants of the same or neighbouring villages were ganged together. The average number in the gang was 60. The arrangement was successful.

29. The piece-work system being in force there was no classification.

30. Calls for no answer.

31. The system of payment by results was adopted from the first. The task system was adopted in the case of few weakly persons who could not be ganged.

32. If started in time and if the workers came to work before starving themselves for some time, relief can be adequately afforded. Unfortunately however some people do not leave their home until they have undergone some privation. The number of dependants is an important factor. Where the number of dependants is large, the relief would not be adequate. On the other hand, those who have few or no dependants would earn more than their requirements.

33. The work having been carried on on piece-work system the question of demanding a full task did not arise. No allowance was made for the distance the workers had come. Subsequently the tasks sanctioned in Government Resolution F—588, dated 5th March 1900 were adopted. They were more severe but all the dependants were from that time fed in the kitchen. They were introduced, as the earnings under the former system were insufficient to provide for the dependants. The piece-work tables originally adopted allowed a margin of 6 to 9 pies per worker of Class I or II on account of dependants.

34. The famine being at no time very acute the experience was insufficient to form an opinion. The physical condition of the flesh-eating classes was fair. They purchased cattle which were sold very cheap and beef formed a substantial part of their diet. Some others had private resources to supplement their earnings. Several persons left the work after staying for a short time when they found that the earnings were insufficient. This was, however, due to a small outturn of work owing in some cases to diminution of stamina and in others unwillingness to work. The general impression was that the wages were just adequate.

It did not appear that the workers saved upon their earnings. Copper coin did return freely.

35. Rest-day wage was not given to those on piece-work. It was allowed in the case of workers on task. They could hardly earn more than the minimum wage. I would prefer grant of a rest-day wage.

36 and 37. The task system was in use to a very limited extent and almost entirely for weakly persons. I cannot therefore offer an opinion.

38. Payment was made weekly. More frequent payments are desirable in the case of new arrivals,

say twice during the the first week. This is not impracticable.

39. They were paid weekly. They did run into Bania's debt.

40. To the head of the sub-gang. This was convenient to all, and I think it is preferable.

41. During the week ending 19th May the earnings of all workers were between 61 and 92·76 per cent. of the maximum amount earnable as shown below :—

No. of Persons in the gang.	Percentage of earnings.
34	76
58	86
54	83
56	84
70	88
67	92·76 Wadar gang.
54	86
49	84
67	85
67	85
65	76
67	84
75	83
55	72·7
61	81
64	82
60	83
58	78
45	61
73	85
69	81
1,268	

Penal wage was never introduced.

42. At the outset the Bombay system of limited piece-work (Section 212 of the Famine Commission Report of 1898) was in force. Eventually as the earnings were not found to be sufficient for the maintenance of dependants the piece-work rates were revised and all dependants were fed in the kitchen.

43. Up to 30th May the rates included provision for dependants. However, when the number of dependants was large, the Supervisor sent the surplus to the kitchen. From 31st May the rates were reduced and all the dependants were fed in the kitchen. Such of the children and weakly persons capable of some work as could not be ganged were put on task with a minimum wage. I think this system is preferable.

44. No.

45. Muster-rolls were not kept. I do not know what arrangement existed for promptly introducing the Code task system.

46. The wages were calculated according to the Code rules (Sections 111 to 113) on price-lists of jowári supplied by the Mámlatdárs.

47. I presume this question is for the Public Works Department authorities to answer.

48. Please see Government Resolution No. F—538, dated 5th March 1900.

49. No.

Small village works.

50. No small village works were opened.

51 to 58. As no small village works were opened, these questions call for no answer.

Special relief.

59. No aboriginal tribes.

60. None in my charge. The cutting and collection of fodder provided employment to the inhabitants of forest villages in the Belgaum and Khánápur Tálukas.

61. No.

62. No.

63. They could earn a living, although bare, in their own craft.

64. Calls for no answer.

65. The subjoined table shows statistics regarding dimunition in cattle :—

Month and year.	Plough cattle.	Milch cattle.	Young stock.	Total of Columns 2, 3 and 4.
1	2	3	4	5
June 1899	21,260	18,510	19,126	58,896
Do. 1900	17,162	13,530	15,194	45,886
Decrease	4,098	4,940	3,932	13,010
Percentage of decrease ...	19·27	26·90	20·5	22·9

No special measures were taken beyond importing grass.

66. 69 bales of pressed grass weighing 144 maunds 30 lbs. were imported in the Athni Táluka. They commanded a ready sale.

Gratuitous relief.

67. (*a*) With cooked food.

(*b*) There were no small village works.

68. Village dole was the only form of gratuitous relief employed.

69. No. It did not go beyond the classes referred to.

70. No poor-houses were opened.

71 and 72. Call for no answer.

73. One kitchen was opened on the relief work in the Athni Táluka on 5th February and it was closed on 21st August along with the work. The dependants of the workers and such of the recipients of village dole within a radius of about 2 miles as could be removed to the kitchen were fed there.

74. The ration prescribed in Section 105 (*a*) of the Famine Relief Code was provided. When the

work was proceeding within a reasonable distance of the kitchen, meals were distributed twice, at 10 A.M. and 5 P.M., and the people were compelled to feed on the premises. But when it became straggling the meals were distributed on the work.

75. There was no other kitchen ever opened.

76. Such of the dependants of workers as were certified by the Supervisor in charge of the work were only admitted. In the case of village dole those selected by the Relief Aval Kárkun, Mámlatdár and the District Deputy Collector were alone admitted.

77. Calls for no answer.

78. The Circle Inspectors recommended and the Relief Aval Kárkun selected, sending a list weekly to the District Deputy Collector. The lists were checked by the Mámlatdár and the District Deputy Collector. In case of urgency the Circle Inspectors were authorized to put people on the list in anticipation.

The recipients were inspected at least once a fortnight by the Circle Inspector and once in six weeks by the Relief Aval Kárkun. The Mámlatdár and the District Deputy Collector inspected during the course of their tours.

79. Payment was made daily in grain at the village chávdi.

80. None.

81. Jain, Lingáyat and Marátha cooks were employed. No reluctance was ever shown by any class.

82. The Special Civil Officer was in charge. The Supervisor and the Hospital Assistant examined and weighed the meals almost daily. The Relief Aval Kárkun, the Mámlatdár and the District Deputy Collector examined at their visits and the two latter checked the daily returns which were obtained.

83. No cheap grain shop was opened.

84. Calls for no answer.

Suspensions and Remissions of Land Revenue.

85. Only 4·45 per cent. of the land revenue of Athni Táluka has remained outstanding. It is being proposed to remit 3 per cent. and suspend 1·45 per cent.

86. General capacity of the individual has been taken into account. Local individual inquiries have been made by the Mámlatdár and the District Deputy Collector.

87. After the commencement of the collection of revenue.

88. There was practically no such occasion except in one village, where the local inquiry showed that all the amount suspended is outstanding from the actual holders.

8. No.

General.

90. Such was not the case.

91. No.

92. About 60 per cent. of the workers were from the class of labourers, and about 25 per cent. petty land-holders and 15 per cent. tenants, &c.

93. Yes, because they have become accustomed and prudent.

94. No.

95. Yes.

96. Calls for no answer.

97. The village officers punctually fill in Village Form No. 14, which has been specially prescribed for the purpose. In large villages, village peons are appointed to collect the information by assigning them specified districts.

98. I do not think that high mortality occurred anywhere in the affected parts. Where it did, it was due to cholera, of which there were two outbreaks in 25 per cent. of the villages.

99. I do not think any mortality occurred from impure or insufficient water-supply. Old wells were cleaned and temporary wells were sunk in nála beds where necessary and possible at a cost of Rs. 73. There was no occasion to disinfect water.

100. The workers were not allowed to ease themselves within 300 yards of the huts. A burial ground was set apart. Water-supply was protected by posting watchmen. A birth and death register was kept.

They were sufficient and were supervised by the Special Civil Officer.

101. The grain shops were inspected by the Special Civil Officer as long as they lasted. He also inspected the shops in the adjoining markets of Shedbal and Kágvád lying within a distance of three miles from the work. No unwholesome grain was sold.

102. Before the beginning of monsoon no wild products were available and none were used. Since then they formed nearly one-third portion of their food. 2 or 3 per cent. suffered from diarrhœa on that account. But they soon recovered.

103. No, hardly 2 per cent.

104. Calls for no answer.

105. There were no orphans on hand. There were a few cases of abandoned children, but they were soon claimed by the parents or relations.

106. No.

107. No.

107A. Post cards were obtained by the Collector from the Railway Station Masters in the district reporting weekly imports of food grains. Imports

by road were reported weekly by the Mámlatdárs. There is no water-borne traffic in this district. The estimates of imports by road were of course rough. About 7 per cent. of the assumed consumption was imported.

108. No.

109. There has been some change. The area under jowári has increased more than 25 per cent., and that under cotton has fallen to one-third of the normal. Similarly the area under bájri has fallen and that under gram and wheat has increased. But I am of opinion that the fluctuations are due more to seasonal conditions.

110. Yes. The practice is still prevalent. In famine years grain wages are paid in gathering harvests only. In other cases they are paid in cash. In ordinary years there is no tendency to substitute a cash for a grain wage.

111. In this district they were not departed from.

112. No.

113. Non-official agency was not made use of.

114. The relief work was a small one and no appreciable changes were ever made.

115. No.

N. C. SOMAN,
District Deputy Collector, Belgaum.

Belgaum, 12th January 1901.

1455

Rao Saheb S. B. Upasani.

Replies by Ráo Sáheb S. B. Upasani, Subordinate Judge, Ankleshvar, to the questions drawn by the Famine Commission.

(1) The outlook in the Ankleshvar Táluka was not very cheerful when the rains of 1899 commenced. The previous two or three years' seasons had been indifferent, and the plague which broke out in the year immediately preceding had disorganized trade and agricultural pursuits to a great extent. The famine of 1896-97, though not felt here, had put a severe strain both upon the cultivating classes and the moneylenders. So far as I could observe in the course of my civil work and in the course of the work I had to do in connection with this famine, neither the agriculturists nor their creditors were prepared to meet the sudden distress that befell the country last year. For some years the landlords and the creditors had not received any considerable part of their outstandings and the cultivators were driven nearly to their last resources. The famine therefore told more severely upon all classes than it would have done but for the agricultural depression which had prevailed during the previous few years.

(5) Nearly $\frac{3}{4}$ths of the population, I believe, depends exclusively upon agriculture, either as petty cultivator or labourers.

(32) From what I could observe of the condition of the people who came to relief works here, I am of opinion that the majority of them could not have earned enough if the system of payments by result had prevailed.

So far as I could observe from the general condition of the people who came to poor-houses and relief works, I believe their physical condition would not have allowed of the system of payment by result being enforced, and if such system had prevailed for any length of time, more especially during the acute stage of the famine, it would have added greatly to the sufferings of the workers and perhaps caused even higher mortality than has occurred.

(35) Rest-day wage was given, and I think that was necessary, as it was not possible for the workers to earn sufficiently to lay by anything for the rest-day. Many of them were far too weak to earn even the full wage for the working days.

(36) I think that the minimum wage, as it is, is not high, and any reduction therein would, I am afraid, tell seriously on the people, who in many cases come to the work in far too weak a condition to stand any severe strain on a low diet.

(38) Payments were made weekly except in the case of new-comers. I think daily payments would

be desirable, if possible, but in any case bi-weekly payments should, I think, be practicable.

(39) New-comers were paid daily for the first three days and then bi-weekly for two turns, and this was, I think, necessary in the case of workers who came from a distance and could not get any credit with the Bania.

(40) Payment was made to individuals, and that was I think preferable.

(59) I think it would be desirable to extend the system of small village relief works, so far as possible, especially in cases where large relief works are not within easy distance. That will enable the people to rest at home at night, where they can better take care of themselves and their dependants than they possibly can do in our camps. It will also prevent the necessity of breaking up of homes and enable the people to preserve their cattle and what little property they may have with them. Even in ordinary time the poor people have no much recuperative power, and for generations together continue to live in the same huts, and if their home is ever broken up it becomes very difficult for them to set up in life again. Another reason which in this connection appears to me to deserve consideration is that when acute famine sets in, there is a large number of wanderers and immigrants who have left their homes and have to be cared for and provided in camps, and it would not be desirable to add to their number by compelling those who have their homes and can take care of themselves there to leave them to go a long distance for work. The large works may therefore be kept open for foreigners and others who have come from a long distance or have their homes within a distance of two—three miles of the works. The latter may be allowed to go home every evening if they find it convenient, and the former alone compelled to live in the camps attached to the work. If that were done the camps on the large works will, I think, be more manageable, and there will be less risk of epidemics like cholera breaking out and its being carried to villages. On the works in this táluka every care was taken for sanitary arrangements which succeeded in keeping out cholera for a long time, but when it broke out in adjoining districts it found its way here and caused a sudden desertion from camps in large numbers and spread the infection to villages. Persons thus affected and who attended them had then to be put on gratuitous dole.

Camp life is for various reasons not suited for the better sort of classes amongst the rayats, especially their females, and rather than have to stay on the camps many prefer to stay at home and struggle on in distress so long as it may be possible.

Small village works will also, I think, give greater scope to secure better return for the money spent in relief in the form of permanent improvement of village lands, tanks, wells, roads, &c.

On small relief work in this táluka wages were paid on a reduced scale, but I think for the health

of the workers no change should be made in the rate. Workers have stood a long strain on the regular Works.

I should desire that there should be only one large work in the táluka on which immigrants, labourers and other classes who can leave their homes without any serious inconvenience, may get employment, and a large number of small works be provided nearer home for people for whom it will not be possible to leave their homes without great hardships. This arrangement will be more convenient to meet any exigencies in case any outbreak of cholera occurs in the district, and will also enable cultivators to stay nearer home to look after their cattle and prepare lands for sowing towards approach of next season.

(66) This táluka was a little more favourably situated than the district on the north in having fodder available from the adjoining Rájpipla and Gáikwári territories at the outset. Large imports were from October to January made here by carts, head-loads and railway, and it gave employment to the Bhils and other poorer classes for some time. The demand from the north was, however, pressing, and purchasers from Ahmedabad, Káthiáwár and Ajmere side came down in numbers to make large purchases and prices rose to a high pitch and greater part of the grass imported was exported by rail to these distant places, the rayats here having no means to purchase the necessary stock for themselves at the high prices ruling and were more or less helpless, though grass was then available here. Towards the end of January 1900 the supply from the adjoining territories was exhausted and the people began to feel the pinch more severely. With a view to help the more poor of the cultivators tagávi advances were made for purchase of fodder; but later on it was found that sufficient fodder was not available locally, and that the poor cultivators could not make any imports for themselves. The Collector was pleased to import large quantities for the district and spare a part of it for this táluka.

(67) About 325,000 lbs. of grass was sent to this táluka in April and May and 100,000 lbs. later on. I was put in charge of the distribution and distributed the grass to poor cultivators in consultation with the Táluka and Mahál Officers and District Deputy Collector in charge of the táluka at the cheap rate of Rs. 2 per thousand in the beginning and at Rs. 6 later on to the poorest of the cultivators. The demand was, however, too great to be adequately met with the limited stock kept at my disposal and many applications had to be refused. Towards the end of May, when I had to visit the villages in the circle allotted to me for inspection, I found the condition of the cattle most deplorable. Even for the better classes of cultivators the struggle was too hard to keep up all their cattle and for the poorer ones it was almost beyond hope. Every effort was being made to procure fodder by digging up roots of grass from every nook and corner of land and hedge and by stripping the trees of their leaves and the prickly pear of its blades. It was, however, hardly possible

to keep up the animals on the uncongenial and scanty fodder and they were found to be on all sides half-starved and emaciated. The situation became more critical when the monsoon held off beyond June and I pressed for further help for the rayats in this direction, and the Collector was pleased to make further effort to obtain more grass for this táluka, but there were difficulties in getting more supply at that stage and bringing it here from a long distance. He however arranged to send a further supply of one lákh lbs. more for this táluka, and it came most opportune when the people were giving up all hope of being able to keep up any part of their emaciated cattle.

The relief afforded in this respect was very opportune and valuable and did enable the poorest cultivators to save at least a part of their cattle. The people have reason to feel most grateful to our worthy Collector, Mr. Panse, for his sympathy in organizing the measures to supply the grass at cheap rate, without which it would have been impossible for them to save their live-stock to the extent they were able to do.

(68) On relief work here the dependants were relieved in kitchens.

(69) Gratuitous relief was given in the form of cooked food in poor-house and kitchens attached to works, and by dry grain dole in villages.

The communities on this side are too far caste-ridden to allow any system of distribution of cooked food being adopted for gratuitous relief. Orders for opening kitchens were received from the Collector, and I made every effort to open a kitchen in Ankleshvar for Mahomedans and Hindus who would not join a poor-house, but found it impossible to persuade the better class of people to consent to receive relief in the form of cooked food there.

(70) So far as I am aware gratuitous relief did not go beyond the classes mentioned in paragraph 141 of the Famine Commission of 1880, except when however cholera broke out and dole was sanctioned to be given in villages to persons who had returned home through the scare. That was, I think, a very timely step taken, for numbers of the people had hurried back to the villages where they had no means of employment. Several of them carried the infection with them and those who were attacked were helpless as also their family members, who had to stay with them for attendance. Many of them had also lost their near relations on the outbreak at the work and had no heart to return to the work, more especially when they were widowed females and young children. Under these circumstances the provision made for providing them temporarily at home until the scare was over was well conceived and served to check further spread of the epidemic and helped to save human life and suffering and had a very reassuring effect. Dole was also, at the commencement of the monsoon, allowed to be given to poor cultivators and their dependants who had to return home from works to cultivate their lands.

In the case of cultivators the tests applied were as to whether they had gone to relief work and whether they were actually cultivating their fields.

This step was also, I think, well advised when the presence of the cultivators at home was urgently needed to prepare their lands for cultivation, and it was not possible for them to leave the works unless they had some provision for them at their villages. If this provision were not made it would by no means have been possible to bring under cultivation the greater part of the lands held by these poor cultivators and they would have lingered helplessly on the work even after the monsoon set in, when it was not possible to keep the large works open and to get any work done. The people in that case would also have suffered to a greater extent from exposure to the rains.

(71) Two poor-houses were opened in this táluka, one at Ankleshvar and the other at Hánsot. The former was opened on 1st December, 1899 and was in my charge from January 1900, and my information chiefly relates to this poor-house alone. Persons who were admitted were for the most part decrepits, invalids, and emaciated persons unfit for work. The classes of people who came to the poor-house were mostly Kolis, Bhils, Talavias, Chowdras, Dhedas and other low castes, but there were also some men of higher classes, *i. e.* Rájputs, Kanbis, Kumbhárs, &c.

The number was large after April. It for some time was over 700.

(72) - Admission was allowed in poor-houses only to such vagrants and immigrants as were in an emaciated and starving condition and not able to work. Persons who were too emaciated to do any work on relief works and who had no relations on the work as dependants on whom they could be retained, were sent to the poor-house, but no able-bodied men were sent to it as a punishment for refusal to work.

(73) Strict care was taken to weed the poor-house by sending at once to work persons who were found to be able to do some kind of work on the relief works.

(74 A) The poor-house ration was according to the scale sanctioned in the Famine Code. It was for the most part of rice and dál (pulse), jowár and pulse alternately with vegetable and condiments. Hospital rations were given to sick persons and others under the directions of the Medical Officer in charge of the work.

I think a higher scale of ration is necessary for the poor-house, considering the debilitated condition in which the inmates are received in the poor-house. In many cases they come too far emaciated and require better nourishment than can be given under the scale allowed. Better food and in sufficient quantity would help more to restore them to health than medical treatment and diet, which they are generally found reluctant to submit to.

The inmates did not appear to be quite satisfied with the diet allowed and asked for more food than they got under the scale allowed. Greater leniency in this respect is, I think, desirable to keep down the mortality among these poor people, and even in the interest of economy that will be more advisable, considering that if they are sooner restored to health, the sooner shall we be able to send them to the works.

The scale of pulse and vegetable should, I think, be in particular raised above that at present allowed.

Provision may also be made for varying the diets.

(75A) The selection for gratuitous relief in the villages was made by the village officers, and the dole recipients were inspected by the Circle Inspectors twice a week, also by other inspecting officers whenever they visited the villages.

(76A) The dole was ordered to be given daily at the village choura in the presence of the village Panch.

(78) Kumbhárs were for the most part employed as cooks. Rájputs, Pátidárs, Kachias, Kanbis and the Mahomedans of the town showed reluctance to take cooked food from the beginning. When some of them were reduced too far they had to forget their scruples and partake of the food in the poor-houses.

(80) One cheap grain shop was opened here for some time with funds spared by the Mahajans of the town, and grain was sold therein to the poorest classes, and the admission to its benefit was regulated by the personal knowledge of the committee by whom the shop was managed. The relief was successful so far as it went. But the funds being limited, the shop was closed, when dole was opened for decrepits. About Rs. 3,300 worth of grain was sold from the shop and the loss sustained came to over Rs. 500.

(88) The relief was not, I think, excessive or defective, considering the circumstances of the táluka. It was given in a liberal spirit and in proper time, and served to afford the needful help without which it would have been impossible for the people to tide over the dire distress.

(89) The people in receipt of relief belonged to the classes of State rayats, occupants and other tenants and labourers.

(95) The mortality in the poor-house in my charge began to increase towards the end of March. It was to a great extent due to the people, especially immigrants, having come to the poor-house in an advanced state of emaciation, brought on presumably by insufficient or unsuitable food. Doolies were kept in the poor-house and by the Municipality to go round and pick up sick and emaciated persons, and a number of lives were thus saved, but these people added greatly to the mortality of the

poor-house, as in many cases it was found impossible to make them rally by any amount of nursing.

(96) The water-supply was pure and sufficient and measures were taken to keep it pure by disnifecting the wells with permanganate of potash whenever necessary.

(97) A paka building was secured for hospital attached to the poor-house. Separate sheds were put up for diarrhœa, measles, small-pox and cholera cases at suitable distances. Tin bed-pans were provided and sufficient number of Bhangis were kept. Separate latrines were provided for males and females. The Superintendent and the Hospital Assistant in charge of the poor-house looked to the sanitary arrangements and they were supervised by me, the District Medical Officer, the Collector, and other inspecting officers.

(102) Out of the total number of orphans in the poor-house, 4 were sent to Mr. Chhabildas, orphanage at Málád, 24 to the Mahipatram Rupram orphanage at Ahmedabad, 447 to the Surat Mahajans' home for destitute children. A few were made over to their relations.

(109) One Staff Corps officer was employed to supervise the táluka and a number of Native sepoys from the Military Department in superintending the ambulance system. I think supervising officers may be obtained from Educational, Judicial and Survey Departments.

(110) So far as my work went I made use of non-official agency in the distribution of charitable fund; for selection of recipients from the several communities; from among the Mahomedans I availed myself of the assistance of a leading Mahomedan Inámdár of the place and a few other Mahomedan and Pársi gentlemen; for selection among Hindus I sought the assistance of the leading men of the several castes. These supplied me with lists of persons in need of relief in their castes. At a later stage I availed myself of the assistance of four pleaders of my Court and divided the town into four wards and allotted one part to each for house-to-house inspection. They did the work thoroughly and brought to my notice several cases of sick persons who could not, as also of high caste females who would not, come to ask for help, though they badly needed it. At my request some of the leading gentlemen were kind enough to visit the poor-house from time to time and showed their interest in a practical form by privately distributing clothes to the inmates and offering additional vegetable to supplement the limited allowance sanctioned in the Code. The Mahajans were pleased to place in my hands Rs. 100 for the inmates of the poor-house and Rs. 500 for the relief of the respectable poor of the town; other private gentlemen also sent small subscriptions for the inmates of the poor-house, and all this help to a great extent facilitated and lightened my work and enabled me to extend relief to the really needy and deserving, who could not other-

wise in many cases have come to ask for it, and to administer small comforts for the poor-house inmates, which I could not have otherwise done. This intelligent co-operation will, I think, be available in all towns and may be more extensively utilized for distribution of charitable relief to persons of respectable classes, especially Mahomedan ladies and high caste females. Similar assistance to a more limited extent will also, I think, be available in the larger vilages and may be profitably secured for information and consultation in the matter of selection of recipients for the relief. The distribution in villages be made by some responsible officer of Government.

(112) I think that massing of people on large works does tend to disorganize family life and to a certain extent weaken social restraint and relax moral ties. It is difficult to suggest effective means, but I would submit that compulsory residence in camps may not be insisted upon in the case of persons who have their homes within easy reach. I also think that drafting to long distances may also be avoided and so far as possible resort be had to small relief works within easy reach for each circle of a táluka with a central large work, where foreigners and vagrants who have no homes within the táluka may be accommodated and such of the people from the táluka as may conveniently go or be drafted to it, as suggested in my reply to question No. 59. In camps people from the same villages and so far as possible from the same caste and families be allowed to camp close to each other and a responsible experienced Police officer be kept specially in charge of the camp with necessary staff of watchmen for the night.

S. B. UPASANI,
Sub-Judge, Ankleshvar.

1403

Mr. G. V. Da'ta'r.

Replies by Mr. G. V. Dátár, Mámlatdár of Bágevádi, District Bijápur, to the questions drawn up by the Famine Commission, published at pages 35 @ 40 of the "Bombay Government Gazette," Part I, dated the 3rd January 1901, for the Bágevádi Táluka of the Bijapur District.

Introductory.

1. The out-look in this táluka was favourable, there having been rain (two inches) in the first week of June 1899.

The character of the harvest in the two preceding years was as follows:—

Year. (Mrigsal).	Kharif.	Rabi.
1897-98	12 annas	8 annas.
1898-99	10 annas	8 annas.

2. The kharif sowings were not up to normal, being on 75,000 acres only. 50 per cent. of the normal kharif cultivable area was sown. The normal cultivated area was arrived at from the division of the táluka lands into $\frac{1}{3}$rd kharif and $\frac{2}{3}$rds rabi, according to the fitness of soil, there being 450,000 cultivable area in this táluka.

3. The average rainfall of this táluka during the rainy season is 30 inches. The actual rainfall in the rainy season of 1899 was 18 inches and represented 60 per cent. of the average. The rains in 1899 ceased in October almost; and, completely in November; and, the distribution of the rainfall from June to September was as below as compared with the average rainfall :—

	Average.		Actual.	
	Inches.	Cents.	Inches.	Cents.
June ...	4	8	2	44
July ...	3	23	0	12
August ...	4	56	1	43
September ...	8	41	13	19

Though there was good rainfall in September, the downpour was too rapid and within less than a fortnight, the rainfall was followed by a very severe wind; the result was that during the continuance of the rain sowings could not be made, and, on cessation of rain when sowings were started, the lands got dried up too soon; and whatever moisture there was left, there was no further rain to keep up. The consequence of this was that the rabi crops did not thrive so well as could be expected. The rainfall (in September) though plentiful yet being too late for the kharif crops, they could not be saved except in a few fields by that rainfall.

4. Hence the kharif harvest in 1899 represented 25 per cent. of a normal harvest.

5. 75 per cent. of the total population (102,444) of the táluka depends exclusively on agriculture—

(*a*) as petty cultivators 60 per cent.

(*b*) as labourers 15 per cent.

Preliminary action.

6. The necessity for relief was not assumed from the fact of crop failure, but proof of necessity was required by compliance with tests.

7. Beggary increased and exodus of people was observed emigrating in search of employment. Even some agriculturists emigrated, leaving their fields which produced nothing or very little.

8. A test relief work was opened at Hunshal on metal-breaking.

9. We were well prepared to meet famine.

(*a*) Yes.

(*b*) Yes. Though lists were not actually kept up men qualified for famine service were ready.

10. The relief programme contemplated large public works, such as, the Sangogi and Hullur Tanks and small village works also. A programme of village works was ready in reserve from the beginning.

11. (*a*) First test works were started and men were drafted thence from time to time to large work (Sangogi). Doles to Walikars (Section 60) and to destitutes (Section 57) were started in a major part of the táluka. The former continues up to date.

(*b*) the destitutes were collected in 5 convenient places in the táluka and those above 6 miles of those centres are still kept on dry doles.

(*c*) In the five poor-houses there were kitchens and cooked food is being distributed from there.

(*d*) To such of the respectable poor as had no means of livelihood and could not attend relief works, relief was given from the Indian Charitable Relief Fund. Relief was also given from the Indo-American Fund to poor agriculturists to purchase seed for sowing to a small extent.

(*e*) No.

12. Since December 1899 the three Circle Inspectors were relieved of their ordinary duties and directed to do the following duties in connection with the Famine under the control of the Mámlatdár and the Assistant Collector :—

(*a*) To arrange for village relief by payment of doles.

(*b*) Tagái was given by the Mámlatdár and the Assistant Collector to stimulate the local employment of labour.

(*c*) Contributions in very small amounts were raised at Bágevádi and Mangoli to supplement the Indian Charitable Relief Fund.

(*d*) The Circle Inspectors and the Màmlatdár observed the condition of the people.

13. Loans were issued at the outset to agriculturists as detailed below :—

Under what Act.	Amounts.	Number of Persons to whom Tagái granted.	Purposes for which Tagái granted.						Conditions of repayments.	Details of instalments.
			Eradicating weed.		Putting up mounds.		Wells.			
1	2	3	4		5		6		7	8
			(a) Amount.	(b) Number of Persons.	(a) Amount.	(b) Number of Persons.	(a) Amount.	(b) Number of Persons.		
	Rs.									
Land Improvement Loans Act.	7,200	29	2,175	9	3,225	13	1,800	7	In whole ...	Ten annual equal instalments.
			Seed.		Cattle.					
Agriculturists' Loans Act.	4,295	*101	775	*87	3,520	*99	...	...	In whole ...	Two annual equal instalments.
				2 Persons were paid Tagái for purchase of seed alone.						
				14 do.	do.		do.		cattle.	
				85 do.	do.		do.		both.	

14. Irrigation wells can be made in a part of the táluka through which some sweet water nalas pass.

The average depth below the surface of water on the cessation of the rains in 1899 was 5 feet.

The digging of wells was encouraged by loans and they were successful—

(*a*) in securing the crop on the ground, such as maize, wheat, &c., in the case of 6 out of 7 wells.

(*b*) As a permanent improvement in the case of all these six wells; one has not executed the work at all as yet.

(*c*) As a temporary measure to employ labour in case of no wells.

15. Labour being the first criterion of the need for relief the Hunshal Test Relief Work was first undertaken as a Local Fund work. This work was carried on under District Local Board's orders and it was under supervision of the Mámlatdár and the Assistant Collector.

16. The task prescribed for third class labourers was exacted on the said test relief work, irrespective of sex and previous occupation.

17. The payment was in strict proportion to results. There was a maximum wage as fixed by the Famine Code, but neither was there a minimum wage, nor a rest day allowance nor an allowance to dependants.

18. There was no regular relief work in this táluka; as, however, when the number on the Hunshal Test Relief Work went on increasing, part of the coolies were drafted to the regular relief work at Sangogi, those from other districts and tálukas were the first selected for being drafted. There was some small crop to be reaped in the middle villages of the táluka which attracted many of the coolies till the end of March. In April there was no source of employment in the táluka itself.

Therefore the people were advised to take advantage of the regular relief work started at Sangogi, if they wanted work.

Large Public Works.

19. When it had been decided to open regular relief works the large work that was first opened was the Sangogi Tank for the people of this táluka.

20 to 64. Questions from 20 to 64 cannot be answered in the Bágevádi Táluka, there being no small or large relief works in the táluka.

65. There was no perceptible mortality of cattle necessitating the taking of measures for the prevention of mortality.

66. No, there being sufficient fodder for cattle generally.

Gratuitous Relief.

67. As there were neither large nor small relief works in the táluka, no dependants were relieved.

68. The form of gratuitous relief most employed in this táluka is feeding in poor-houses. As the number of destitutes was spread all over the táluka at the end of July, they were, as a further test of need, told to go to a central poor-house, where they are being fed since August.

69. The recipients of gratuitous relief were selected by the Village Officers and Punch with local knowledge. The same selections were supervised by the Circle Inspectors, and further checked by the Mámlatdár and the Assistant Collector. Admission to gratuitous relief was restricted by the following test and not merely because they complied with eating the cooked food that was given to them :—

1. The aged and infirm, and, extremely worn out people.
2. The blind, crippled, insane and the sick.
3. Pregnant women and young children,

whose relatives would not or could not support them, or, who had none else to take care of.

70. On the 1st of the August 1900, 5 poor-houses were opened in this táluka. The low caste people, such as, Dheds, Mángs, Mahomedans, Bedars and Kurabs, &c., frequented the poor-houses most. The numbers were large in October 1900, last week.

71. Yes. No relief works in the táluka.

72. Yes, after the recipients got strong and were able to work and earn their livelihood, they were sent out from the poor-houses.

73. No kitchens in this táluka.

74. No kitchens in this táluka.

75. No relief work in this táluka.

76. No kitchens.

77. The ration provided by Section 105 (*c*) of the Famine Code was provided.

Jowári bread and tur sauce and oil were the food at poor-houses. Yes; it was varied according to the circumstances of the recipients, if sick and weak, cooked rice was served out.

78. The Village Officers drew up the village gratuitous lists, they were checked by the Circle Inspectors monthly and by the Mámlatdár and the Assistant Collector, whenever they visited the village.

79. The payment was made—

(*a*) In cash to Walikars up to end of October and in grain since then; the destitutes were paid grain all throughout.

(*b*) The payment of cash dole was made weekly to Walikars in the Táluka Kacheri. Grain dole was paid in villages weekly to Walikars and daily to destitutes.

(*c*) Since November grain dole was paid at the homes of the Walikar recipients; and to destitutes from the beginning.

80. No.

81. Lingáyats and Marátha cooks were employed. It was only the Bráhmins that have entirely refused to take food at these poor-houses from the beginning. At the outset some Lingáyats refused to take food there; they are now taking cooked food there; but their number is very small.

82. No kitchens in this táluka.

83. No cheap grain shops in this táluka.

84. Do. do.

Suspension and Remissions of Land Revenue.

85 (*a*). Suspensions, Rs. 31,813, have been suspended.

(*b*). *Nil.*

86. The suspensions were based not only upon crop failure, but also upon the general capacity of the individual to pay, such capacity having been determined upon information furnished by the Village Officers. Suspensions were granted to such persons as had no crops and as were unable to pay until next crop.

87. The suspensions of land revenue were determined after the close of the revenue year 1899-1900, in which they were payable.

88. There are no Jamindári tracts in this táluka.

89. No.

General.

90. No.

91. The relief given in the táluka was neither excessive nor defective except that the represent-

ative Watandár Mahárs were not given dole just as Walikars were, the Mahárs being the most useful among the inferior village servants, and, their duties being such as cannot be performed by others.

92. The low caste, such as, the Dheds and the Mángs, the Kurabs, the Mahomedans, Lamanis and Bedars were the classes of people generally in receipt of relief. Land-holders and other persons occupying land were not in receipt of such relief.

93. Owing to recent famine of 1896-97 and bad years following the same and without time for recouperation this famine following, people are quite out of resources and therefore necessity hurries them to the relief work more readily than before.

94. No.

95. Yes.

96. The tests of the Code are sufficient to prevent persons nót in need of relief from seeking it unnecessarily.

97. The Police Pátil registers births and deaths by actually making enquiries in his village. The register is tested with special care by Circle Inspectors, the Mámlatdár and District Officers. The information regarding births and deaths was furnished by the Maistri in charge of Hunshal Test Relief Work to the Village Officers who registered them as usual.

98. There was no high mortality in the táluka except for a few months about July when cholera prevailed, which was due to impurity of drinking water.

99. When cholera was prevalent in the táluka, permanganate of potash was used to disinfect wells once only; and other measures of sanitation were adopted, and the epidemic gradually ceased without causing much havoc.

100. Special sanitary arrangements were made.

(*a*) On the test relief work at Hunshal by employment of a special sweeping establishment, and, a hole was dug in the nála for potable water which was watched by a water-drawing establishment.

(*b*) The inside of the poor-houses are kept clean partly by the cooks and partly by the inmates of the poor-houses; the outsides are swept clean by the village Dheds.

(*c*) No kitchens.

The arrangements were sufficient. The arrangements were supervised by the Superintendent and the Punch, the Circle Inspectors and the Mámlatdár.

101. There was only one test relief work in this táluka, where there was no grain shop on the work itself.

102. On the said relief work no such supplementing of food was observed.

103. On the said work there were no immigrants from the Native States.

104. *Nil.*

104 (*a*). The famine of 1900 has not as yet ended. The orphans in the poor-houses are still being fed there.

105. The existing arrangements meet all requirements, I have to suggest, however, that aid to poor farmers be given to buy seed.

106. Complaints were heard from merchants exporting grain from this táluka that the grain bags they sent to the Railway Station for being booked were not booked for days together for want of wagons to take the load resulting in heavy losses partly by exposure to rain and partly by theft. This, however, had no effect on the local prices of food-grains as there were others in the market who had not such losses and they sold at the usual prices and the others had to keep pace with them.

107. The Circle Inspectors informed us of the stock of food-grains and the local Sávkárs of the external traffic; but the statistics were not reliable. No importations of jowári took place in this táluka in the famine of 1899-1900, as this is itself a jowári producing táluka. Rice, as usual, is imported from the Dhárwár District and the Moglai, Bombay, Bizawada, &c., which forms a proportion of $\frac{1}{60}$ th of the assumed consumption of the people of this táluka.

108. Yes. When there were no relief works in this táluka, labour had become very cheap. When, however, the Hunshal Test Relief Work was started the labourers were attracted to that work, but finding on experience that the payments made there were strictly proportional to results, some of them abandoned that work and reverted to private labour.

109. Yes.

(*a*) Of late years there has been an increase of double cropping, for instance,

(i) in gardens, the number of which has increased to some extent, maize or chilly are sown first and after reaping the crop Kúngóne, or, water-wheat are sown in the same year;

(ii) in dry kharif lands first sessamum is sown and then after the crop is reaped in the same soil gram is sown.

(*b*) (i) In gardens instead of food-grain crops, plantation and sugar-canes are sown.

(ii) In dry lands instead of food-crops, the more valuable crop of cotton is largely sown.

(iii) In substitution for jowári which is the staple food-grain of the táluka, the more valuable crop of wheat is grown in dry lands with the sole object of exportation.

110. No.

The tendency is for cash wages only which oscillates in sympathy with the rise or fall in prices.

111. Yes. (i) By introducing the system of payment by results in relief works.

(ii) By substituting one pice for milk in place of the grain dole provided for infants in poor-houses, originally.

The first was not justified for the following reason :—

> The persons seeking relief in relief works, who were compelled to do so for want of private means of livelihood, resorted to relief works in a weak condition. Being already famished, they could not accomplish the full task to be entitled to the full wages. The less the nourishment, the less the power to work. This system defeats the object of giving relief which is to relieve them not gratis, but to exact from them an average amount of work. I might, therefore, suggest that either the minimum wages system should be strictly adhered to, or, the standard of task should be lowered so as to be accomplished by all sorts of labourers.

The second was thoroughly justifiable. Because grain-dole to infants had the effect of supplementing only the mother's wages which she already got as a nursing mother, while the child would starve without milk, its actual food. Therefore, provision for milk for infants was most reasonable. I would, however, mention that a pice for a full day is not sufficient, nor can milk be kept unspoiled for such a long period, and, would, therefore, suggest that two pice a day be sanctioned, *i. e.*, a pice for each of the two milking times.

112. No.

113. No.

114. No relief works in this táluka.

115. Ditto.

G. V. DA'TA'R,

Mámlatdár of Bágevádi.

Rao Saheb DAJI DHONDDEV PATANKAR.

Answers by Ráo Sáheb Dáji Dhonddev Pátankar, Mámlatdár of Karmála, to the questions of the Famine Commission.

The outlook in this district at the commencement of the rains of 1899 was not very hopeful as there was no reasonable and sufficient rainfall till after the end of August.

The character of the harvests in the two preceding years was as given below.

Rain in 1897.—Kharif rain was on the whole insufficient; kharif crop was very poor in all the tálukas except Mádha and Pandharpur.

Rabi rain was sufficient for sowing purposes, but for development it was insufficient, and so the rabi crop was also poor. Kharif outturn was from 2 to 10 annas and rabi yield was also from 2 to 10 annas.

On the whole, rainfall in the district was deficient and capricious.

In the year 1898 rainfall at the head-quarters of the district was a little over the average and elsewhere approximating to the normal fall. Ante-monsoon rain light. Monsoon commenced in June; but there was no rain for the kharif crop until the middle of July and hence kharit crop was not sufficiently sown. There was light rain in August, and so the kharif began to wither. There was rain in September and it helped the kharif a great deal and rabi sowing was commenced; but there was no rain in October. In November there was light rain. On the whole rabi rains were deficient, and the season was on the whole poor for kharif crop, which mostly yielded from 4 to 6 annas on an average. In places it was only 3 annas rabi; jowári from 8 to 12 annas. Rabi was on an average 8 annas and kharif from 4 to 8 annas.

2.—The kharif sowing was not up to normal, only 20 per cent. of the normal kharif area could be sown. The normal cultivated area is based on the average of the cultivated kharif area for the years 1893-94 to 1898-99.

3.—The average rainfall of this district during the rainy season is from 26 to 28 inches. The actual rainfall in the rainy season of 1899 was 13 inches 2 cents. It represents 50 per cent. of the average rainfall. The rain ceased in the last week of September. The distribution of rainfall

from June to September compared with that of the preceding four years was as follows :—

	June.	July.	August.	September.
1895 ...	·63	7·13	2·45	17·60
1896 ...	3·17	4·38	2·33	·9
1897 ...	2·81	2·15	1·53	10·28
1898 ...	6·48	6·44	3·0	14·76
1899 ...	1·12	0·13	1·84	8·71

4.—The actual area cultivated with kharif in 1899 was one-fifth of the normal kharif area of the district and the outturn was 4 annas on an average. In estimating the outturn of crops 12 annas have been taken to represent a normal crop.

5.—About 60 per cent. of the total population of the district depend exclusively on agriculture, half as petty cultivators and half as labourers.

85.—Land revenue was suspended to the extent of Rs. 2,28,000 out of a total demand of Rs. 11,68,000 or 20 per cent. No remission was granted.

86.—Suspensions were based on the system prescribed in the Famine Code. They were based upon failure of crops, as also on the general means of the cultivator. The information as to the general means of the cultivator was obtained from the village officers and Circle Inspectors and submitted to the Sub-divisional Officers after being sifted by the Mámlatdárs.

87.—The estimates as to the amount which would have to be suspended were called for before the collections of revenue began, but the amount was determined afterwards.

88.—There are no jamindári tracts in this district.

89.—No facts came to notice tending to show that sufficient relief was not given by means of suspensions. There may, however, be instances in which the relief may have been abused or may have failed to reach the right persons; but I believe these instances are very few. These could have been avoided had the inspection of crops been more exhaustive and done by more skilful hands. A majority of the village officers is quite incapable of forming a correct idea of the area under cultivation and the outturn—which facts play the greatest part in determining the individuals fit to be given suspensions or remissions. The time at the disposal of the Circle Inspectors to test the inspection work of the village officers is too short looking to the amount of work to be done and its importance.

D. D. PATANKAR,
Mámlatdár of Karmála.

103

Sardar Bahadur BECHARDAS VIHARIDAS DESAI.

Replies by Sardár Bahádur Bechardás Viháridás to the questions drawn up by the Famine Commission.

Question 1.—I had been in the service of His Highness the Nawáb Sáheb of Junágadh whence I came here in this (Kaira) district in the month of September 1899, and therefore I am not fully aware of the condition of the district in the two preceding years. I am informed that about 50 per cent. of the cultivation of the kharif had been made, but even that had totally failed. Moreover, in the year 1897-98 the cultivation was normal, and the produce was if not 16 annas it was at least 12 annas in a rupee; but in the plague-stricken parts the cultivators were to a certain extent unable to reap the produce.

3.—(*a*) The average rainfall is between 30 and 35 inches.

(*b*) In the year 1899 it only rained from 7 to 8 inches.

(*c*) It ceased raining in the month of August.

4.—I have no personal knowledge of it; it is said, however, to have been two annas in a rupee.

5.—The people of this district have not taken to commerce, and hence most of the population depends on agriculture. Agriculturists, farmers and labourers, all have to depend on it.

Preliminary Action.

6 and 7.—The farmers, labourers and lower population had begun to die of starvation, and though test works were opened it is as really necessary that the relief work should have been opened as soon as the rain and consequently the crops failed. But it seems that the proper relief schemes were delayed, and during this time the helpless mass had to sell their cattle to butchers at nominal prices for maintenance and, besides, they had to cut down their trees and sell them. For their sustenance and for paying up the Government revenue they had to dispose of the ornaments, ordinary utensils, even tiles and also their farm implements. Even when they were thus trying to pay up the Government rent, yet I do not see that they have been able to fully pay up the Government rent.

8.—The people of this district are slow and unwilling to move and therefore the only advisable

measure, as it appears from the last famine, is to open relief works at intervals of about every five miles.

14.—Irrigation wells can be made in all parts of this district. In the districts on the west of the River Mahi most of the wells are 100 feet deep, but in other parts the water currents are generally found to be at 40 feet under the surface. In the year 1899 the currents went nearly 6 feet down. In this district irrigation wells can be of great advantage and the scheme would be a great success. By this well water the crop would be good and ample. These wells would be of permanent improvement to the soil, and it would be also good as a temporary measure to employ labour in times of famine.

15.—A few relief works had been opened by the Municipalities, chiefly consisting of road repairs and excavation of tanks. Afterwards Government undertook relief works on a larger scale but of the same sort. All these works were far removed and hence the famished could not take proper advantage of it. I do not know whether any works had been opened by the Local Board.

16, 17 and 18.—These questions cannot be answered without full inquiries and I have not sufficient means to answer them at present.

19.—In this district, as far as I know, at seven or eight places large relief works had been opened, *e. g.*, at Borsad, Anand, Mátar, Mehmadabad, Kapadvanj, Thásra, and on a smaller scale at Nadiád.

23.—At large relief works admission was free, but only the poor were allowed. No proper standard was kept as to the measure of the work to be done by each labourer.

24.—As I have already stated in the article No. 8, if relief works had been opened at the interval of each five miles all people would have been equally benefited.

30.—My experience leads me to consider that a distinction should have been drawn in the wages of men and women by half an anna, and that that rate could supply nearly 2 lbs. of corn of common quality to man and $1\frac{1}{2}$ lbs. to woman; and, if financial difficulties do not allow so much, $1\frac{1}{2}$ lbs. should be given to man and $1\frac{1}{4}$ lbs. to woman.

32.—It is my opinion that the suggestions made by the Famine Commission of 1898 cannot be fully applied in all the provinces, and it is only owing to this that great difficulties are experienced in putting the Famine Code fully into execution in times of severe famines. The officers employed there had to meet with great difficulties. I am of opinion that alterations should be made in the

existing rules, so as to make them suitable to the needs of different localities.

34.—The scale adopted was adequate, but the corn supplied by the Banias was not of good qualities. The workers were not able to save anything from their earnings.

35.—I do not know whether the rest-day wages were given, but it is my opinion that they should be given because the wages given on working days were not enough to help them on leave days.

36.—If the rates only supplied them with necessary food, they should not be fined for lagging in their work.

Small Village Works.

59.—Small village relief works should be opened for those who cannot join large ones on account of one reason or other, and these relief works should consist of sinking of wells, excavation of tanks and road communications between different villages. These works should be conducted under the supervision of a committee consisting of the police pátil, traders and such other leading members of the village.

60.—There are many aboriginal tribes in this district. No special test was applied to them and no relief works were taken near their homes.

61.—There are no forests and pasture lands in this district.

63.—As far as my information goes, Government had taken no measures to relieve artisans, but the Missionaries encouraged the Dheds in their craft.

64.—When the artisans were not supplied with labour in their own trade, they were not reluctant to go on ordinary relief works.

66.—Most of the cattle died of hunger; those belonging to Mahomedans and other flesh-eater classes were used by their owners for food, and some were sold to the butchers by them for their maintenance. Owing to this cattle camps were opened both at Umreth and at Nadiád, and some of the remaining cattle were sent to the Pánjarápole. I was a co-worker with Revd. Mr. Park in the Nadiád cattle camp, where about 600 cattle had been collected, but owing to the want of agreeable fodder most of them died, and hence we were not able to save a good number.

67.—Compressed grass was supplied later on by the Government, but most of the cultivators could not avail themselves of that benefit, as the grass was not supplied to them at the opportune time, and owing to this reason many of the cattle died. The fodder was ample in distant parts of the

country, but the inability of the Railway Company to supply waggons prevented the supply of fodder at the opportune time.

GRATUITOUS RELIEF.

68.—All the dependants were relieved by large relief works, poor-houses, kitchens and doles, but those measures were taken rather too late.

72.—The poor-houses were only used for orphans, for the sickly and the weak, and for vagrants and immigrants; but vagrants and immigrants, if found healthy, were sent to the relief works on the next day.

73.—Yes.

75.—Village gratuitous relief tests in this part were prepared by the Táluka Relief Committee and checked by the District Relief Committee.

76.—Payments were made in cash and grain—cash monthly and grain daily.

80 and 81.—Cheap grain shops were not opened.

SUSPENSIONS AND REMISSIONS OF LAND REVENUE.

85.—Jamindárs in general have dealt with their cultivators by remitting full rents or part of the rent according as the crops were produced.

GENERAL.

91.—When the people had no means for their sustenance and they had exhausted their whole property, I believe then and then only they went to take their relief.

I cannot conclude this without observing here that the visit of His Excellency the Viceroy to the affected districts had good moral effect on the officials as well as the people.

BECHARDA'S VIHA'RIDA'S DESA'I,
of Nadiád.

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Mr. P. D. KIRAUL.

Reports by the District Inspector of Land Records and Agriculture, Sátára, Nos. 15 and 16, dated 13th January 1901, containing answers for Sátára to Nos. 2, 4 and 106 of the questions of the Famine Commission.

Questions 2 and 4.—In obedience to your memorandum No. FAM.—181, dated the 7th instant, I beg respectfully to report that kharif sowings were not up to normal during 1899-1900. They were 53 per cent. less of the normal cultivated area. The average of the areas sown with kharif crops during the seven years from 1892-93 to 1898-99 is taken as the 'normal' cultivated area (*vide* statement below):—

Year.	KHARIF AREA UNDER		
	Cereals.	Pulses.	Total.
1892-93	1,071,826	270,667	1,342,493
1893-94	977,769	247,228	1,224,997
1894-95	911,841	248,106	1,159,947
1895-96	955,073	240,866	1,195,939
1896-97	897,677	236,997	1,134,674
1897-98	877,402	226,571	1,103,973
1898-99	912,453	233,670	1,146,123
Total for 7 years...	6,604,041	1,704,105	8,308,146
Average per year ...	943,434	243,414	1,186,876
Area sown in 1899-1900	519,173	105,644	624,817
Decrease per cent. ...	55 per cent.	43 per cent.	53 per cent.
Area out of the kharif sown area which came to maturity ...	278,985	36,098	315,083
Percentage on sown area	54 per cent.	34 per cent.	50 per cent.

The total area sown with kharif crops during 1899-1900 was 624,817 acres, of which the crops in 315,083 acres only, or in about 50 per cent. of the sown area, reached to maturity and yielded an outturn between 4 and 5 annas. Thus the actual

kharif harvest of the past year was only 15 per cent. of the normal harvest on the normal cultivated area which has been arrived at as stated above.

Question 106.—In obedience to your memorandum No. FAM.—182, dated the 7th instant, I beg respectfully to report that although for a few years (1893-94 to 1895-96) there appeared a little tendency on the part of the cultivators to introduce a change in the character of the crops sown usually by substituting more valuable non-food crops, such as ground-nut and sugarcane, for the ordinary food crops, that tendency was checked since 1896-97 by the poor outturns which those crops and particularly the ground-nut yielded during the two preceding years and that since at least 1896-97 the usual practices of growing food crops do not appear to have undergone any great change, as will clearly be seen from the two statements marked A and B herewith submitted.

2. From statement A, which gives the areas under the different classes of crops since 1885-86 to 1899-1900, it will be noticed that the total area under food crops classed as 'cereals' and 'pulses' averaged a little over one million and seven hundred thousands during the six years from 1885-86 to 1890-91. In 1891-92 it fell by about 60,000 acres or at about 3 per cent., but the fall is to be attributed partly to the unfavourable character of the season of that year and partly to the imperfect registration of crop statistics as is explained in the following paragraph. In 1892-93 the monsoon was generally favourable, and although then the area under food crops increased by 17,000 acres, it did not reach the average of the preceding six years (1885-86 to 1890-91). Since 1893-94 to 1895-96 there was again a decline, which was on an average 9 per cent. It was due chiefly to the extensive cultivation of ground-nut and sugarcane, encouraged probably by the bumper harvests which these crops yielded in 1892-93 (*vide* printed report of the Agricultural Department for that year) and also by the high prices which they fetched in the market. Ground-nut exhibits an increase in the area at 36 per cent. and sugarcane at 20 per cent. over that for the year 1892-93. The tendency, however, to take up extensively to the cultivation of these crops and particularly of the ground-nut ended with the famine year of 1896-97, or, to speak more exactly, one year before that, *viz.*, 1895-96. Ground-nut decreased so rapidly that in 1898-99 the area for it was 34,374 acres against 71,477 acres in 1894-95, and in 1899-1900 it was only 26,702 acres. In the case of sugarcane the decrease is not regular, but the area occupied by it is considerably short of what was taken up in 1893-94.

3. The decrease in the area under food crops since 1891-92, as compared with the average area taken up by them during the preceding six years (1885-86 to 1890-91), is, as will be observed, not counterbalanced by a proportionate increase in the

area for non-food crops. In the same way the areas of current fallows show a little unusual variations in the different years. These things, in my humble opinion, throw a great doubt on the accuracy of the figures for 1885-86 to 1892-93, especially as we know that these statistics in those years were compiled by the village officers alone and were never subjected to any superior, careful and systematic check. Since the introduction of the staff of the Circle Inspectors in 1892-93 this work of the village officers is more closely supervised and checked, and there is therefore reason to believe that the statistics recorded during the recent years are more trustworthy.

4. Statement B is submitted simply to show how the areas of the principal non-food crops produced in this district varied in different years. The only crops in it that deserve particular notice are, I believe, turmeric, ground-nut and cotton. As regards ground-nut, I have, I think, sufficiently explained the variations which this statement shows, and the same explanation may be offered as regards the variations in the areas occupied by turmeric. Cotton has, it seems, been deteriorating of late and its place is probably occupied by food crops.

5. The area under double cropping, which is given in statement A for each year, would show that since 1892-93 it has increased by about 19 per cent. The variations in the area under this head depend particularly on the rainfall and upon the supply of water used for irrigation. The character of double cropping is not uniform all throughout the district. In some places food crops are sown, while in others vegetable is made. In my humble opinion, therefore, the 19 per cent. increase in the area under this head does not indicate that any great change has of late been wrought in the character of crops usually sown.

B.

Statement showing the areas occupied by the different classes of crops during the several years from 1885-86 to 1899-1900.

Classes of crops.	Areas sown during														
	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900
I.—Cereals	1,385,282	1,386,919	1,370,190	1,397,138	1,394,779	1,422,299	1,365,479	1,316,869	1,237,762	1,197,630	1,204,815	1,131,240	1,218,961	1,186,014	1,203,216
II.—Pulses	290,742	323,007	333,682	306,101	327,251	308,605	282,640	348,285	336,551	335,783	318,775	281,243	289,511	311,913	157,509
III.—Orchard and garden produce.	8,846	9,215	9,703	9,259	9,641	11,492	9,732	9,727	11,536	9,635	9,401	13,377	16,373	13,596	10,669
IV.—Drugs, &c... ...	10,535	10,033	9,399	7,455	7,408	10,955	8,327	7,564	9,593	7,758	8,615	5,645	8,554	11,279	4,877
V.—Condiments and spices.	19,101	18,024	18,798	19,572	18,472	18,294	17,883	17,723	19,926	22,510	18,672	16,336	16,499	18,714	18,249
VI.—Starches	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...	...
VII.—Sugarcane	12,534	13,537	15,402	17,045	12,632	13,433	13,685	12,759	15,496	14,845	12,852	13,388	11,597	13,393	14,841
VIII.—Oilseeds	79,600	95,869	101,123	109,070	111,227	109,330	97,842	90,221	125,971	116,331	118,159	102,872	87,712	87,544	93,973
IX.—Dyes	26,609	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...	...
X.—Fibres	28,893	27,116	26,690	19,238	18,768	18,511	18,044	17,248	21,748	23,084	20,519	19,328	16,722	17,066	7,394
XI.—Miscellaneous ...	.....	230	50	75	143	91	69	89	86	395	394	415	311	338	344
Total cropped area ...	1,862,142	1,883,950	1,885,037	1,881,953	1,900,321	1,913,010	1,813,701	1,820,485	1,778,669	1,727,971	1,712,202	1,583,884	1,666,210	1,659,357	1,511,072
Area cropped more than once.	93,826	104,172	114,119	113,034	119,155	114,066	92,136	130,733	135,790	132,332	125,223	90,093	136,699	136,914	79,261
Net remainder cropped area.	1,768,316	1,779,778	1,770,918	1,771,919	1,781,166	1,798,944	1,721,565	1,689,752	1,642,879	1,595,639	1,586,979	1,493,791	1,529,541	1,522,943	1,431,811
Current fallows ...	400,361	395,878	402,513	405,120	401,119	392,418	402,305	426,903	473,447	522,152	535,105	638,357	602,313	607,880	698,113

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B.

Statement showing the areas occupied by the principal non-food crops in the Sátára District during the years 1885-86 to 1899-1900.

Name of crop.	Areas occupied during														
	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.
1. Tobacco	10,122	9,473	9,210	7,265	7,028	10,471	7,994	7,251	8,995	7,448	8,335	5,224	8,257	10,654	4,880
2. Chillies	13,576	12,237	13,386	14,785	13,955	13,450	12,722	12,824	12,675	13,768	11,110	9,[illegible]1	10,361	11,390	9,505
3. Turmeric	3,955	3,908	3,465	2,537	2,345	2,559	2,766	2,788	4,239	5,210	4,107	3,727	3,539	4,147	4,781
4. Ground-nut	51,134	46,856	51,001	56,346	60,720	59,852	55,391	52,433	71,348	71,477	70,334	68,851	40,691	34,374	26,702
5. Safflower	.....	23,036	27,760	25,292	25,945	26,277	23,746	19,192	29,956	24,303	27,604	18,771	28,937	23,819	49,941
6. Nigerseed	24,250	21,868	18,904	17,869	20,865	20,111	15,473	15,892	20,951	16,568	15,588	13,243	14,607	20,265	13,038
7. Cotton	16,240	13,276	12,693	6,846	6,041	7,626	7,901	4,550	8,426	8,740	6,043	5,588	5,202	4,926	1,653

P. D. KIRAUL,
District Inspector, Land Records and Agriculture, Sátára.

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Mr. B. M. Malabari.

Answers by Mr. Behramji M. Malabari to the questions of the Famine Commission.

7. The holding off of the monsoon, the drying up of wells and tanks, the cultivator's inability to keep his cattle going, the felling of trees by the people, connived at by kind-hearted officials, the sight of wanderers in search of work or food, and of carcases and hides, made me think the time was passing by for adoption of relief measures.

11 (*d*). Private charity in towns seemed to play an important, though by no means an integral part, in most of the places visited by me and by my agents. But we often felt, the charity might have been better organized and more wisely distributed.

22. The arrangements for hutting, sheltering, etc., appeared, on the whole, to be unsatisfactory. As a rule, the huts were too small and too flimsy to hold the occupants in anything like comfort. The large relief camps in the beginning, at any rate, presented a look of unpreparedness, or showed very inadequate timely provision, in this respect.

23. From what was observed by my agents and by myself, individual seekers of relief could not obtain admission, sometimes for two or three days, and had to form themselves into gangs before they were admitted. In many places, the distance test appeared to be insisted on, and residence to have been made compulsory. Even where this was not intended, it came, in effect, to the same thing.

32. Yes, I am inclined to agree with the Famine Commission of 1898 that payment by results is ill-suited to the work people in times of acute distress.

34. The scale of wages appeared to me and to my agents to be generally inadequate, considering that the people of Gujarat, as a whole, are accustomed to two solid meals a day, that the whole wage seldom went to the worker, and that the bania often gave short weight. In few places, if any, I found the scale unduly liberal, except through temporary laxity or oversight. As a rule, the copper seemed to return freely to the bania, thanks to the paymaster's zeal on his behalf. There was no systematic saving, that I could see, on what the work people had earned. The majority of workers did not earn enough for their immediate wants, what with the operation of the penal clauses and rigid tasks. The supposition as to "saving" probably arose from some of the people selling the cloth pieces presented to them by the charitably inclined, or from the women wearing metal trinkets, often mistaken for silver, or from their buying lacquered bangles for a copper or two. It must be remembered that no married woman can do without bangles. She will forego her food and

everything else for these tokens of the married state.

35. A rest-day wage was given to the workers, in some centres, on their having done six days' work satisfactorily. I should prefer that plan to be more widely adopted.

36. As a rule, the minimum wage seemed to me and to my agents to be too low for further clipping, except in the case of able-bodied idlers here or there. I myself saw few such, and often felt that for the majority of those hard at work even the maximum wage was not sufficient to keep them long in condition. Many of these, who had come late, or from distances, had already lost strength.

38. In the places visited by us payment was made weekly. I should favour a more frequent payment; if this is not practicable in all cases, it must be made so, if only to save the workers from the bania.

58. I saw few small works existing close enough to large works, to induce the labourers to exchange. Moreover, they seemed to think they would not be allowed to move; nor was this easy for them to do, considering their physical condition and the terms on which they had been admitted.

59. Yes; I certainly hold that small local works should be multiplied, wherever this is practicable, in preference to large central works. As a matter of fact, we are obliged to open these local works as the season advances. Why resort to them so late and so unwillingly? I would begin with groups of villages, each within a radius of, say, three to five miles. This would obviate all the more serious disadvantages of central works—the herding together of human beings like cattle, the almost certain risk of epidemics, the enormous cost of supervision, and so on. Famine does not affect individuals, but communities. The remedy, like the evil, ought to be diffused, not centralized. There is, of course, the difficulty of finding capable and honest workers. But the Englishman's genius for training and organizing is equal to that, any day. The silent unseen compulsion of that genius is everywhere converting men of little education into useful and reliable agents. It will not be difficult for Government, if they once make up their mind to it, to train up the people to administer their own relief. Even the villager in India is no stranger to self-interest. The following have seemed to me to be among the chief advantages resulting from small village works:—

(*a*) The people have not to leave their homes. Those who know how strong is the love of home and everything attaching to it, inherent in the Indian villager, can alone understand what this means.

(*b*) In organizing small village-works there is no dread of the "distance test" which usually adds to the sufferings of the victims of famine. To say that the

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"distance test" acts as a safeguard against undeserving people seeking Government relief, is to assert that the "penal wage" is introduced in order to discourage gluttony. To ask the hungry to trudge miles and miles to seek Government protection and support, and to force them to return the same long and weary way, as soon as the first showers have fallen, or an epidemic has broken out, appears to be about the worst method of relieving distress.

(*c*) Both crops and revenue suffer this way; villages are depopulated; the soil, instead of becoming rich, becomes poor, because the natural manure is practically lost and the cultivators are compelled to seek relief elsewhere. This loss cannot be compensated by relief-wages, which are often too poor even for bare subsistence, and when the villagers are forced to return to their homes after the central works are broken up, they are unable to begin agricultural work at once, and feel more helpless than ever.

(*d*) By dispensing relief to villagers at their doors the wants and requirements of the villagers are better studied, and that too at a less cost. For example, wells may be sunk, small tanks built, roads between two adjoining villages made, fields kept in proper order for the coming monsoon, and many other light operations can be attended to. On account of untimely and heavy showers whole fields are sometimes washed away; this can be prevented by putting mud ridges round them, and a trench outside. Such works would be of permanent advantage, both to the people and to Government. Huge tanks, built as central works, are of doubtful utility, as they do not hold water even for three or four months after the rains. Wells are a sad necessity in many villages, and these can be sunk by unskilled hands.

(*e*) By *local* supervision in small villages, which is not impossible to secure, though difficult, the land-owners will be encouraged to look after the village relief-works with *personal* interest.

(*f*) Large central works often give rise to complaints of fraud and malpractices. There will be some corruption on small works also. But in villages the chances and temptations for misappropriation are fewer. For one thing, villagers will take good care that the money

primarily meant for their relief is not appropriated for their own use by those responsible for its disbursement.

(*g*) Small relief-works will reduce the number of people on gratuitous relief. For the relatives who remain at home will take care of the old and the infirm, and will be able to maintain them. When villagers are obliged to quit their homes and families, the condition of the aged and the sick becomes truly pitiable.

(*h*) There is the great risk of epidemic diseases breaking out on large relief works, which is almost absent in the case of small ones. In Government camps people are huddled together anyhow, without distinction of caste, rank, at times of sex or age. There is much accumulation of filth and aggravation of suffering on large camps. Epidemic disease is almost inevitable. Then comes panic; the petty officials on the spot know not how to enforce order or restore confidence. Some are themselves in mortal fear, and are amongst the first to run for life. Nothing of the sort could happen on small works. Fever or small-pox might, perhaps, break out, but it could easily be kept under control.

(*i*) The Indian villager prefers dying at home. The dread of death in a foreign land—for so does the central work appear to him—is, to him, intolerable. Small relief-works, if they do no good, will secure for the villagers at least a peaceful death at home.

(*j*) The expense of providing temporary sheds is saved in the case of small relief-works. Lakhs of rupees are spent in attempting to give wages or food to the relief-seekers before the gangs are properly organized and the works are in full swing; and yet many of them complain that they are starving. Plans and estimates of large central works are not made before the famine is officially announced, and has, consequently, well advanced. In small villages such confusion can easily be avoided.

(*k*) On large central relief-works enormous supervision charges have to be incurred. These, also, can be saved, in a great measure, in small villages, since it would be to the interest of the villagers themselves to work properly, without too many eyes to keep watch over them. Too much of supervision, it has to be remembered, generally means too much interference. And that leads to black-

mailing, the curse of India. Local works, it is objected, would attract many who are not in need of State relief. I do not think our people are dead to all sense of self-respect. But supposing a proportion of them are idlers or scamps, and supposing there is no way of eliminating them, yet the contentment of the whole population is an immense advantage to the State, and the saving in expense on local works is an equally important advantage.

63. In no place, that I knew of, was an attempt made last year to relieve artisans in their own crafts.

64. Yes; till very hard put to it, this class of workers would not go to ordinary relief camps. Many of them are physically unfit for the sort of work provided by the State. Caste and social considerations also deter not a few.

74. The poor-house ration usually was supposed to be 12 ounces for the adult male, and consisted of *bajri* or *jowri*. It was varied in many places, but more or less according to the wish or whim of the supervising agency on the spot, and the means available.

75. The recipients of gratuitous relief were inspected by the Doctor or the Hospital Assistant once, and in some places, twice a day. The Civil Surgeon and the District Collector or his Assistants also looked them up once a week, or at longer or shorter intervals.

86. Nowhere in Gujarat did I hear of timely suspension of the revenue demands of the State, and nowhere, of course, of any remission of revenue. On the contrary, the revenue officials went about collecting the dues as usual whilst the ryots were suffering from acute distress. In some parts the Talati, I was told, picked up anything he could find in the huts—the ryots' humble domestic or personal belonging, down to the grinding stone or the blanket. In this way, the credit, justly earned by the British Nation and Government, for unparalleled humanity in times of distress, was lost to them. No gain, in the shape of revenue, multiplied a hundredfold, could compensate for this loss of credit, the most valuable investment that foreign rulers could make. Suspension of revenue, I submit, should be notified on the approach of widespread agricultural distress, and a promise of reasonable remission should be held out, so that the ryots may not lose heart. In the absence of such timely action in Gujarat even the better class of cultivators had no incentive to extra effort and no chance of extraneous aid. The moneylender refused to lend even to his old constituents, as he knew the prospect of recovering the loans to be very remote, with the State demand hanging over the ryot's head for years after such a famine. I understand the Government of Bombay are beginning to realize the position.

89. The people most to benefit by gratuitous relief were the agricultural labourers and the poor with no occupation; then came tenant farmers, and then small proprietors of land, respectable artisans and others, as the distress grew in intensity and their resources disappeared. The majority of those whom I saw in the poor-houses seemed to have run down to a degree.

90. Except among the very "low" classes, demoralized by chronic adversity, I have seen no readiness to come to the relief camps on famine occurring for the first time. Where famine has recurred, or is protracted, the people are naturally less backward in seeking relief. But even then, there are large classes, the Bhils, the Kali Paraj, and other hill and forest tribes, not to mention the Thakurs, Girasias, Talukdars and others, whom it is not easy to move out. The Indian villager everywhere wants little to live upon; but that little he prefers having near his home.

91. As a whole, the sufferers in Gujarat did not seem to press unduly for State relief. They did not appear to me or to my agents to avail themselves of such relief before exhausting their own resources. Famine relief works have, by no means, been so attractive to the people on this side.

112. Yes; it has been my experience for years that "the massing of people on large works tends to disorganize family life" and to give rise to the other evils referred to. I have seen this happen in some of the best managed relief camps. The chief remedy, I submit, is to find relief work for the people more or less near their homes, wherever this is practicable. Where large central works are found absolutely necessary, I would venture to advise that the families and dependents of the workers be encouraged to keep near them, without interfering with the efficiency of their work.

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